

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Trade name	: POTASSIUM METABISULPHITE
Chemical name	: Potassium disulphite; Potassium pentaoxo disulphate
IUPAC name	: dipotassium disulphite
EC-No.	: 240-795-3
CAS-No.	: 16731-55-8
REACH registration No.	: 01-2119537422-45
Formula	: K ₂ S ₂ O ₅
Synonyms	: Potassium pyrosulphite
Product group	: Trade product
Other means of identification	: E224

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category	: Professional use
Industrial/Professional use spec	: For professional users only
Use of the substance/mixture	: Preservative used for the sulfur dioxide brought.
Use of the substance/mixture	: For œnological use

Title	Use descriptors
Handling in solid state in solution - liquid products (ES Ref.: SE1)	SU4, SU6a, SU6b, SU7, SU8, SU9, SU16, SU20, PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC20, PC23, PC24, PC25, PC26, PC28, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40, PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC12, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, ERC1, ERC2, ERC4, ERC6a, ERC6b, ERC6d, ERC7, ERC8b
Handling in solid state (Medium fine powder, medium dusting) (ES Ref.: SE2)	SU4, SU6a, SU6b, SU7, SU8, SU9, SU16, SU20, PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC20, PC23, PC24, PC25, PC26, PC28, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40, PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC21, PROC22, PROC23, PROC24, PROC25, PROC26, ERC1, ERC2, ERC4, ERC5, ERC6a, ERC6b, ERC6d, ERC7, ERC8b
Handling in solid state (Granules, low dust content) (ES Ref.: SE3)	SU4, SU6a, SU6b, SU7, SU8, SU9, SU16, SU20, PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC20, PC21, PC23, PC24, PC25, PC26, PC28, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40, PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26, ERC1, ERC2, ERC4, ERC5, ERC6a, ERC6b, ERC6d, ERC7, ERC8b
Handling in solid state (Fine powder, high dust content) (ES Ref.: SE4)	SU4, SU6a, SU6b, SU7, SU8, SU9, SU16, SU20, PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC20, PC23, PC24, PC25, PC26, PC28, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40, PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26, ERC1, ERC2, ERC4, ERC5, ERC6a, ERC6b, ERC6d, ERC7, ERC8b
Handling in solid state in solution - liquid products (ES Ref.: SE5)	PC30, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC12, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC20, ERC1, ERC2, ERC4, ERC6a, ERC6b, ERC6d, ERC7, ERC8b

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Title	Use descriptors
Handling in solid state (Granules, low dust content) (ES Ref.: SE6)	PC30, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC21, PROC22, PROC23, PROC24, PROC25, PROC26, ERC1, ERC2, ERC4, ERC6a, ERC6b, ERC6c, ERC6d, ERC7, ERC8b
Handling in solid state (Medium fine powder, medium dusting) (ES Ref.: SE7)	PC30, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26, ERC1, ERC2, ERC4, ERC6a, ERC6b, ERC6d, ERC7, ERC8b
Handling in solid state (Fine powder, high dust content) (ES Ref.: SE8)	PC30, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26, ERC1, ERC2, ERC4, ERC5, ERC6a, ERC6b, ERC6d, ERC7, ERC8b
Use in photographic applications (ES Ref.: SE9)	PC30, ERC8b

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

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1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Australia	NSW Poisons Information Centre The Children's Hospital at Westmead	Locked Bag 4001 NSW 2145	13 11 26	
Bulgaria	Национален токсикологичен информационен център Многопрофилна болница за активно лечение и спешна медицина "Н.И.Пирогов"	бул. Ген. Едуард И. Тотлебен 21 1606 София	+359 2 9154 233	
Canada	Ontario Poison Centre (OPC)	The Hospital for Sick Children 555 University Avenue ON M5G 1X8 Toronto	1-800-268-9017 (416) 813-5900	
Canada	BC Drug and Poison Information Centre (DPIC)	655 West 12th Avenue BC V5Z 4R4 Vancouver	1-800-567-8911 (604) 682-5050	
China	National Poison Control Center	Chinese Center for Disease Control and Prevention Nanwei road, No.29 100050 Beijing	+86 10 831 32 046	
Croatia	Centar za kontrolu otrovanja Institut za medicinska istraživanja i medicinu rada	Ksaverska Cesta 2 p.p. 291 10000 Zagreb	+385 1 234 8342	Information available 24/7 in Croatian and English
Czech Republic	Toxikologické informační středisko Klinika pracovního lékařství VFN a 1. LF UK	Na Bojišti 1 120 00 Praha 2	+420 224 919 293 +420 224 915 402	
Denmark	Giftlinjen	Bispebjerg Bakke 23 Opgang 20 C 2400 København NV	+45 82 12 12 12	
Georgia	National Toxicology Information Advisory Center	Tbilisi State Medical University Department of Toxicology - 7 Asatiani St. 380 077 Tbilisi	+995 99 533320	
Greece	Poisons Information Centre Children's Hospital P&A Kyriakou	11762 Athens	+30 2 10 779 3777	
Hungary	Országos Kémiai Biztonsági Intézet Egészségügyi Toxikológiai Tájékoztató Szolgálat	Nagyvárad tér 2. 1437 Budapest, Pf. 839 1097 Budapest	+36 80 20 11 99	
Israel	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096	+972 4 854 1900	
Japan	Japan Poison Information Center	Tsukuba Medical Center 1-1-1 Amakubo 305-0005 Tsukuba City, Ibaraki	+81-29-856-3566 +81-72-727-2499	
Jordan	National Drug & Poison Information Center of Jordan		0798506755 00962-6-5353444	
Kazakhstan	Republican Toxicology Center	Tole-bi 93 480083 Almaty	+7 3272 925 868	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504	

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Country	Organisation/Company	Address	Emergency number	Comment
New Zealand	National Poisons Centre	Dunedin School of Medicine, University of Otago PO Box 913 9054 Dunedin	0800 764 766 +56 2 2 247 3600	
Poland	National Poisons Information Centre The Nofer Institute of Occupational Medicine (Łódź)	ul. Teresy 8 P.O. BOX 199 90950 Łódź	+48 42 63 14 724	
Romania	Department of Clinical Toxicology Spitalul de Urgenta Floreasca	Calea Floreasca Bucuresti	+40 21 230 8000	
Russia	Информационно-консультативный центр по токсикологии (RTIAC) Министерство здравоохранения Российской Федерации	3 Сухаревская Площадь Блок 7 129090 г. Москва	+7 495 628 1687 (только на русском)	
Serbia	Nacionalni centar za kontrolu trovanja - VMA	Crnotravska 17 11000 Beograd	+381 11 360 84 40	
Slovenia	Center za klinično toksikologijo in farmakologijo Interna klinika, UKCL	Zaloška 7 1000 Ljubljana	+386 522 52 83	
South Africa	Tygerberg Poison Information Centre	Division of Clinical Pharmacology Faculty of Medicine and Health Sciences Stellenbosch University - PO Box 241 8 000 Cape Town	0861 555 777 +56 2 2 247 3600	
Sweden	Giftinformationscentralen	Solna Strandväg 21 171 54 Solna	112 – begär Giftinformation	
Turkey	Ulusal Zehir Merkezi (UZEM) Refik Saydam Hıfzısıhha Merkezi Başkanlığı	Cemal Gürsel Cd. No: 18 Sıhhiye Çankaya 06590 Ankara	114	Information is provided to public and medical personnel on poisoning incidents via 114.
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	16/17 Framlington Place Newcastle-upon-Tyne NE2 4AB	0344 892 0111	Only for healthcare professionals

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Country	Organisation/Company	Address	Emergency number	Comment
United States of America	American Association of Poison Control Centers	515 King St., Suite 510 VA 22314 Alexandria	1-800-222-1222 +56 2 2 247 3600	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 1

H318

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes serious eye irritation. Causes serious eye damage.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

:



GHS05

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H318 - Causes serious eye damage.

Precautionary statements (CLP)

: P280 - Wear eye protection, face protection.

P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.

EUH-statements

: EUH031 - Contact with acids liberates toxic gas.

2.3. Other hazards

Other hazards which do not result in classification

: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type

: Mono-constituent

Name

: Potassium_Metabisulfite

CAS-No.

: 16731-55-8

EC-No.

: 240-795-3

Name	Product identifier	%
Potassium metabisulphite - E224	CAS-No.: 16731-55-8 EC-No.: 240-795-3 REACH-no: 01-2119537422-45	100

3.2. Mixtures

Not applicable

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In case of doubt or persistent symptoms, consult always a physician. Remove victim from polluted area. Take off immediately all contaminated clothing. Never give anything by mouth to an unconscious person. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. If unconscious place in recovery position and seek medical advice. Loosen tight clothing such as a collar, tie, belt or waistband. Apply artificial respiration if breathing stopped. Immediately consult a doctor/medical service. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Rinse immediately with plenty of water for 15 minutes. Immediately consult a doctor/medical service. Wash contaminated clothing before reuse. Wash skin with plenty of water.
First-aid measures after eye contact	: In case of eye contact, immediately rinse with clean water for 10-15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Call a physician immediately.
First-aid measures after ingestion	: If swallowed, rinse mouth with water (only if the person is conscious). Remove person to fresh air and keep comfortable for breathing. Never attempt to induce vomiting : risk of inhalation. Give water to drink if victim completely conscious/alert. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice. Loosen tight clothing such as a collar, tie, belt or waistband. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: More detailed information: See section 11.
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: Eye irritation. Serious damage to eyes.
Symptoms/effects after ingestion	: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Gastrointestinal complaints.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: If there is a fire close by, use suitable extinguishing agents. carbon dioxide (CO ₂), powder, alcohol-resistant foam, water spray. Water spray. Dry powder. Foam.
Unsuitable extinguishing media	: Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: In case of fire and/or explosion do not breathe fumes.
Reactivity in case of fire	: The product is non-combustible.
Hazardous decomposition products in case of fire	: Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide. Thermal decomposition generates : Toxic fumes may be released. Sulphur dioxide. Sulphur oxides.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
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Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Provision to contain effluent from fire extinguishing. Do not contaminate ground and surface water. Dispose in a safe manner in accordance with local/national regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Do not handle until all safety precautions have been read and understood. Evacuate personnel to a safe area.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear personal protective equipment.
Emergency procedures	: Ventilate spillage area. Do not touch or walk on the spilled product. Avoid contact with skin and eyes.
Measures in case of dust release	: Avoid dust formation.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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6.2. Environmental precautions

Avoid release to the environment. Do not flush into surface water or sewer system. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Mechanically recover the product. Contain leaking substance, pump over in suitable containers. Shovel into suitable and closed container for disposal. Clean contaminated surfaces with an excess of water. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site. Do not allow to enter drains or water courses.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid dust formation. Ensure good ventilation of the work station. Local exhaust is recommended where dust may occur. Avoid contact with skin and eyes. Wear recommended personal protective equipment. Store tightly closed in a dry and cool place. Wear personal protective equipment.
Hygiene measures	: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Always wash hands after handling the product. Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep only in the original container.
Storage conditions	: Keep in a well-ventilated room. Keep container tightly closed to prevent moisture pick-up. Keep out of direct sunlight. Store tightly closed in a dry and cool place. Store in a well-ventilated place. Keep cool.
Incompatible products	: Strong acids, strong oxidants. SODIUM NITRATE. Sodium nitrite. Sodium sulfide.
Heat and ignition sources	: Keep away from ignition sources (including static discharges).

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7.3. Specific end use(s)

For œnological use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Potassium metabisulphite - E224 (16731-55-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA [ppm]	≈ 0,5 ppm (SO ₂)
IOEL STEL [ppm]	≈ 1 ppm (SO ₂)
Remark	SO ₂
France - Occupational Exposure Limits	
Local name	Dioxyde de soufre (CAS: 7446-09-5)
VME (OEL TWA)	≈ 5 mg/m ³
VME (OEL TWA) [ppm]	≈ 2 ppm
VLE (OEL C/STEL)	≈ 10 mg/m ³
VLE (OEL C/STEL) [ppm]	≈ 5 ppm
Remark	Limite donnée à titre indicative
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL STEL [ppm]	0,25 ppm (SO ₂)
Remark (ACGIH)	SO ₂

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

POTASSIUM METABISULPHITE (16731-55-8)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	263 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	10 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	78 mg/m ³
DNEL/DMEL (additional information)	
Additional information	Use engineering controls to keep exposures below the OEL or DNEL
PNEC (Water)	
PNEC aqua (freshwater)	1,17 mg/l
PNEC aqua (marine water)	0,12 mg/l

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POTASSIUM METABISULPHITE (16731-55-8)	
PNEC (STP)	
PNEC sewage treatment plant	88,1 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Avoid dust formation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

Personal protective equipment:

Refer to protective measures listed in Sections 7 and 8.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses with side shields. ISO 16321-1. Safety glasses

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses	Dust	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Skin and body protection	
Type	Standard
Chemically resistant protective gloves	EN 374

Hand protection:

Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear. Protective gloves. ISO 374-1

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemically resistant protective gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.4		EN 420, EN ISO 374
Chemically resistant protective gloves	Chloroprene rubber (CR)	6 (> 480 minutes)	0.5		EN 420, EN ISO 374
Chemically resistant protective gloves	Butyl rubber	6 (> 480 minutes)	0.7		EN 420, EN ISO 374

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Other skin protection

Materials for protective clothing:

Wear suitable protective clothing. Long sleeved protective clothing. acid resistant clothing. Splash guard. EN 14605. Dust protection. EN ISO 13982

8.2.2.3. Respiratory protection

Respiratory protection:

No special protection required where adequate ventilation is maintained. Wear suitable respiratory equipment in case of insufficient ventilation. EN 143. EN 149

Respiratory protection			
Device	Filter type	Condition	Standard
Dust mask	Type P1	Dust protection, Short term exposure	EN 149, EN 143
Aerosol mask	ABEK-P3	High dust protection, Mist formation, Long term exposure, Dust protection	EN 14387

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Do not allow into drains or water courses. Avoid release to the environment.

Other information:

Do not eat, drink or smoke during work. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: white.
Appearance	: Crystals. Powder.
Molecular mass	: 222,33 g/mol
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: > 150 °C
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Oxidising properties	: Non oxidizing.
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 150 °C 1.013 hPa
pH	: Not available
pH solution	: 3,5 – 4,6 5% - 20°C
Viscosity, kinematic	: Not applicable
Solubility	: Water: ≈ 450 g/l 20°C
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1,1 – 1,3 kg/m³ 20°C
Relative density	: 2,3 Type: 'relative density' Temp.: 20 °C
Relative vapour density at 20°C	: Not applicable

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Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Bulk density : 1,1 – 1,3 kg/m³

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Can react with. Nitrites. Nitrates. Oxidation agents.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Avoid contact with hot surfaces. Heat. flames or sparks. Moisture.

10.5. Incompatible materials

Oxidizing agents and strong acids. Nitrites. Nitrates.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : See Section 5.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

POTASSIUM METABISULPHITE (16731-55-8)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5,5 mg/l/4h Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Potassium metabisulphite - E224 (16731-55-8)	
LD50 oral rat	> 2300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

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Potassium metabisulphite - E224 (16731-55-8)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal	> 2000 mg/kg
LC50 Inhalation - Rat	> 5,5 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation	: Not irritating to skin (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Severe eye irritation
Additional information	: Causes serious eye damage.
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

POTASSIUM METABISULPHITE (16731-55-8)	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Harmful to aquatic life. Prevent liquid from entering sewers, watercourses, underground or low areas.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)

POTASSIUM METABISULPHITE (16731-55-8)	
LC50 - Fish [1]	464 – 1000 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	89 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	65 mg/l 17h - Bacteria
EC50 72h - Algae [1]	43,8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

Potassium metabisulphite - E224 (16731-55-8)	
LC50 - Fish [1]	460 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	74,9 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	65 mg/l 17h - Bacteria
EC50 72h - Algae [1]	36,8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
NOEC (chronic)	> 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

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Potassium metabisulphite - E224 (16731-55-8)	
NOEC chronic fish	≥ 50 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'
NOEC chronic algae	> 8,41 mg/l Daphnia magna

12.2. Persistence and degradability

Potassium metabisulphite - E224 (16731-55-8)	
Persistence and degradability	Mineral. Not biodegradable.
Chemical oxygen demand (COD)	0,14 g O ₂ /g substance

12.3. Bioaccumulative potential

Potassium metabisulphite - E224 (16731-55-8)	
Partition coefficient n-octanol/water (Log Pow)	≈ -4
Bioaccumulative potential	There is no bioaccumulation.

12.4. Mobility in soil

Potassium metabisulphite - E224 (16731-55-8)	
Additional information	Not volatile

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects : No other effects known, Do not allow to enter drains or water courses

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Do not flush into surface water or sewer system.
Product/Packaging disposal recommendations : Empty remaining contents. Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR) : Not regulated
UN-No. (IMDG) : Not regulated
UN-No. (IATA) : Not regulated
UN-No. (ADN) : Not regulated
UN-No. (RID) : Not regulated

POTASSIUM METABISULPHITE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated
Proper Shipping Name (ADN)	: Not regulated
Proper Shipping Name (RID)	: Not regulated

14.3. Transport hazard class(es)

ADR	
Transport hazard class(es) (ADR)	: Not regulated
IMDG	
Transport hazard class(es) (IMDG)	: Not regulated
IATA	
Transport hazard class(es) (IATA)	: Not regulated
ADN	
Transport hazard class(es) (ADN)	: Not regulated
RID	
Transport hazard class(es) (RID)	: Not regulated

14.4. Packing group

Packing group (ADR)	: Not regulated
Packing group (IMDG)	: Not regulated
Packing group (IATA)	: Not regulated
Packing group (ADN)	: Not regulated
Packing group (RID)	: Not regulated

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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Safety Data Sheet

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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Not listed on REACH Annex XVII

Not listed on the REACH Candidate List

Not listed on REACH Annex XIV (Authorisation List)

Not listed on the PIC list (Regulation EU 649/2012)

Not listed on the POP list (Regulation EU 2019/1021)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

15.1.2. National regulations

France	
Occupational diseases	
Code	Description
RG 66	Occupational rhinitis and asthma

Germany

Water hazard class (WGK)

: WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 2863)

Hazardous Incident Ordinance (12. BImSchV)

: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen

: The substance is not listed

SZW-lijst van mutagene stoffen

: The substance is not listed

SZW-lijst van reprotoxische stoffen – Borstvoeding

: The substance is not listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid

: The substance is not listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling

: The substance is not listed

Denmark

Danish National Regulations

: Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Revision - See : *.

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number

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Abbreviations and acronyms:	
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
EUH031	Contact with acids liberates toxic gas.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H318	Causes serious eye damage.

Full text of use descriptors	
ERC1	Manufacture of the substance
ERC2	Formulation into mixture
ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC5	Use at industrial site leading to inclusion into/onto article
ERC6a	Use of intermediate
ERC6b	Use of reactive processing aid at industrial site (no inclusion into or onto article)

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Full text of use descriptors	
ERC6c	Use of monomer in polymerisation processes at industrial site (inclusion or not into/onto article)
ERC6d	Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)
ERC7	Use of functional fluid at industrial site
ERC8b	Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
PC1	Adhesives, sealants
PC13	Fuels
PC14	Metal surface treatment products
PC15	Non-metal-surface treatment products
PC17	Hydraulic Fluids
PC18	Ink and Toners
PC2	Adsorbents
PC20	Metal surface treatment products
PC21	Laboratory chemicals
PC23	Leather treatment products
PC24	Lubricants, greases, release products
PC25	Metal working fluids
PC26	Paper and board treatment products
PC28	Perfumes, fragrances
PC3	Air care products
PC30	Photo-chemicals
PC31	Polishes and wax blends
PC32	Polymer preparations and compounds
PC34	Textile dyes, and impregnating products
PC35	Washing and cleaning products
PC37	Water treatment chemicals
PC38	Welding and soldering products, flux products
PC39	Cosmetics, personal care products
PC4	Anti-Freeze and De-icing products
PC40	Extraction agents
PC7	Base metals and alloys
PC8	Biocidal products
PC9a	Coatings and paints, thinners, paint removers
PC9b	Fillers, putties, plasters, modelling clay
PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC12	Use of blowing agents in manufacture of foam

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Full text of use descriptors	
PROC13	Treatment of articles by dipping and pouring
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC15	Use as laboratory reagent
PROC16	Use of fuels
PROC17	Lubrication at high energy conditions in metal working operations
PROC18	General greasing /lubrication at high kinetic energy conditions
PROC19	Manual activities involving hand contact
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC20	Use of functional fluids in small devices
PROC21	Low energy manipulation and handling of substances bound in/on materials or articles
PROC22	Manufacturing and processing of minerals and/or metals at substantially elevated temperature
PROC23	Open processing and transfer operations at substantially elevated temperature
PROC24	High (mechanical) energy work-up of substances bound in /on materials and/or articles
PROC25	Other hot work operations with metals
PROC26	Handling of solid inorganic substances at ambient temperature
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC6	Calendering operations
PROC7	Industrial spraying
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities.
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
SU16	Manufacture of computer, electronic and optical products, electrical equipment
SU20	Health services
SU4	Manufacture of food products
SU6a	Manufacture of wood and wood products
SU6b	Manufacture of pulp, paper and paper products
SU7	Printing and reproduction of recorded media
SU8	Manufacture of bulk, large scale chemicals (including petroleum products)
SU9	Manufacture of fine chemicals

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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Annex to the safety data sheet

Identified Uses	Es N°	Short title	Page
Handling in solid state in solution - liquid products	1		20
Handling in solid state (Medium fine powder, medium dusting)	2		27
Handling in solid state (Granules, low dust content)	3		38
Handling in solid state (Fine powder, high dust content)	4		50
Handling in solid state in solution - liquid products	5		65
Handling in solid state (Granules, low dust content)	6		74
Handling in solid state (Medium fine powder, medium dusting)	7		88
Handling in solid state (Fine powder, high dust content)	8		100
Use in photographic applications	9		112

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

1. SE1 - Industrial, Manufacture, Formulation; Handling in solid state in solution - liquid products

1.1. Title section

Handling in solid state in solution - liquid products

ES Ref.: SE1

ES Type: Worker

Association ref code: Manipulation à l'état solide en solution - produits liquides

Environment		Use descriptors
	Contributing scenario controlling environmental exposure	ERC4

Worker		Use descriptors
	Contributing scenario controlling worker exposure	PROC1, PROC2, PROC12
	Contributing scenario controlling worker exposure	PROC3, PROC8b, PROC9, PROC13, PROC14, PROC15, PROC16
	Contributing scenario controlling worker exposure	PROC4, PROC5, PROC8a, PROC10, PROC19
	Contributing scenario controlling worker exposure	PROC7
	Contributing scenario controlling worker exposure	PROC17, PROC18

Assessment method	EUSES
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1.2. Conditions of use affecting exposure

1.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC4)

ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
Assessment method	EUSES

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100

1.2.2. Control of worker exposure: Contributing scenario controlling worker exposure (PROC1, PROC2, PROC12)

PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC12	Use of blowing agents in manufacture of foam

Product (article) characteristics	
Physical form of product	Solid

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

1.2.3. Control of worker exposure: Contributing scenario controlling worker exposure (PROC3, PROC8b, PROC9, PROC13, PROC14, PROC15, PROC16)

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities.
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC13	Treatment of articles by dipping and pouring
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC15	Use as laboratory reagent
PROC16	Use of fuels

Product (article) characteristics	
Physical form of product	Solid

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Use frequency	≤ 5 days/week
Exposure duration	480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

1.2.4. Control of worker exposure: Contributing scenario controlling worker exposure (PROC4, PROC5, PROC8a, PROC10, PROC19)

PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
PROC10	Roller application or brushing
PROC19	Manual activities involving hand contact

Product (article) characteristics	
Physical form of product	Solid

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency	≤ 5 days/week
Exposure duration	480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures	
Avoid inhalation of the product	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

1.2.5. Control of worker exposure: Contributing scenario controlling worker exposure (PROC7)

PROC7	Industrial spraying
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Product (article) characteristics	
Physical form of product	Solid

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Local exhaust ventilation - efficiency of at least	78 %	
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

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Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

1.2.6. Control of worker exposure: Contributing scenario controlling worker exposure (PROC17, PROC18)

PROC17	Lubrication at high energy conditions in metal working operations
PROC18	General greasing /lubrication at high kinetic energy conditions

Product (article) characteristics	
Physical form of product	Solid

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

1.3. Exposure estimation and reference to its source

Information for this exposure scenario:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

1.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC4)

Information for contributing exposure scenario		
As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed		
Required Removal Efficiency (wastewater):	> 99 %	
Release to soil from process	> 1 %	
Air - minimum efficiency of	> 99 %	
Total efficiency of removal from wastewater after onsite and offsite municipal treatment plant) RMMs	> 99 %	

Protection target	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	2,52	1,17 mg/l	0,9	EUSES
Marine water	0,57	0,12 mg/l	0,2	EUSES
Sewage treatment plant	25,2 mg/l	88,1 mg/l	0,4	EUSES

1.3.2. Worker exposure Contributing scenario controlling worker exposure (PROC1, PROC2, PROC12)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,001 mg/m ³	< 0,001	MEASE
Sum RCR - Long-term - systemic effects		< 0,001	

1.3.3. Worker exposure Contributing scenario controlling worker exposure (PROC3, PROC8b, PROC9, PROC13, PROC14, PROC15, PROC16)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,01 mg/m ³	0,001	MEASE
Sum RCR - Long-term - systemic effects		0,001	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

1.3.4. Worker exposure Contributing scenario controlling worker exposure (PROC4, PROC5, PROC8a, PROC10, PROC19)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,05 mg/m ³	0,005	MEASE
Sum RCR - Long-term - systemic effects		0,005	

1.3.5. Worker exposure Contributing scenario controlling worker exposure (PROC7)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	4,4 mg/m ³	0,44	MEASE
Sum RCR - Long-term - systemic effects		0,44	

1.3.6. Worker exposure Contributing scenario controlling worker exposure (PROC17, PROC18)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,1 mg/m ³	0,01	MEASE
Sum RCR - Long-term - systemic effects		0,01	

1.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

1.4.1. Environment

Website	https://www.arche-consulting.be/
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1.4.2. Health

Guidance - Health	MEASE model available at: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php
Website	www.ebrc.de/mease.html

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

2. SE2 - Industrial, Manufacture, Formulation; Handling in solid state (Medium fine powder, medium dusting)

2.1. Title section

Handling in solid state (Medium fine powder, medium dusting)

ES Ref.: SE2

ES Type: Worker

Association ref code: Manipulation à l'état solide (Poudre mi-fine, empoussièrement moyen)

Environment	Use descriptors
Contributing scenario controlling environmental exposure	ERC1, ERC2, ERC4, ERC5, ERC6a, ERC6b, ERC6d, ERC7, ERC8b

Worker	Use descriptors
Contributing scenario controlling worker exposure	PROC1, PROC2
Contributing scenario controlling worker exposure	PROC3, PROC6, PROC8b, PROC9, PROC13, PROC14, PROC15, PROC16
Contributing scenario controlling worker exposure	PROC4, PROC5, PROC8a, PROC10, PROC19, PROC21
Contributing scenario controlling worker exposure	PROC7, PROC17, PROC18
Contributing scenario controlling worker exposure	PROC22
Contributing scenario controlling worker exposure	PROC23, PROC25
Contributing scenario controlling worker exposure	PROC24
Contributing scenario controlling worker exposure	PROC26

Assessment method	EUSES
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2.2. Conditions of use affecting exposure

2.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC1, ERC2, ERC4, ERC5, ERC6a, ERC6b, ERC6d, ERC7, ERC8b)

ERC1	Manufacture of the substance
ERC2	Formulation into mixture
ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC5	Use at industrial site leading to inclusion into/onto article
ERC6a	Use of intermediate
ERC6b	Use of reactive processing aid at industrial site (no inclusion into or onto article)
ERC6d	Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)
ERC7	Use of functional fluid at industrial site
ERC8b	Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
Assessment method	EUSES

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, low dustiness

2.2.2. Control of worker exposure: Contributing scenario controlling worker exposure (PROC1, PROC2)

PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

2.2.3. Control of worker exposure: Contributing scenario controlling worker exposure (PROC3, PROC6, PROC8b, PROC9, PROC13, PROC14, PROC15, PROC16)

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC6	Calendering operations
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities.
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC13	Treatment of articles by dipping and pouring
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC15	Use as laboratory reagent
PROC16	Use of fuels

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

2.2.4. Control of worker exposure: Contributing scenario controlling worker exposure (PROC4, PROC5, PROC8a, PROC10, PROC19, PROC21)

PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
PROC10	Roller application or brushing
PROC19	Manual activities involving hand contact
PROC21	Low energy manipulation and handling of substances bound in/on materials or articles

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

2.2.5. Control of worker exposure: Contributing scenario controlling worker exposure (PROC7, PROC17, PROC18)

PROC7	Industrial spraying
PROC17	Lubrication at high energy conditions in metal working operations
PROC18	General greasing /lubrication at high kinetic energy conditions

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

2.2.6. Control of worker exposure: Contributing scenario controlling worker exposure (PROC22)

PROC22	Manufacturing and processing of minerals and/or metals at substantially elevated temperature
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Product (article) characteristics	
Physical form of product	Solid, molten form
Concentration of substance in product	100
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

2.2.7. Control of worker exposure: Contributing scenario controlling worker exposure (PROC23, PROC25)

PROC23	Open processing and transfer operations at substantially elevated temperature
PROC25	Other hot work operations with metals

Product (article) characteristics	
Physical form of product	Solid, molten form
Concentration of substance in product	100
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures	
Clean equipment and the work area every day	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

2.2.8. Control of worker exposure: Contributing scenario controlling worker exposure (PROC24)

PROC24	High (mechanical) energy work-up of substances bound in /on materials and/or articles
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

2.2.9. Control of worker exposure: Contributing scenario controlling worker exposure (PROC26)

PROC26	Handling of solid inorganic substances at ambient temperature
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

2.3. Exposure estimation and reference to its source

Information for this exposure scenario:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

2.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC1, ERC2, ERC4, ERC5, ERC6a, ERC6b, ERC6d, ERC7, ERC8b)

Information for contributing exposure scenario		
As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed		
Required Removal Efficiency (wastewater):	> 99 %	
Total efficiency of removal from wastewater after onsite and offsite municipal treatment plant) RMMs	> 99 %	
Release to soil from process	> 1 %	
Air - minimum efficiency of	> 99 %	

Protection target	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	2,52	1,17 mg/l	0,9	EUSES
Marine water	0,57	0,12 mg/l	0,2	EUSES
Sewage treatment plant	25,2	88,1 mg/l	0,4	EUSES

Release estimation	Release route	Release rate	Release estimation method
Release estimation			

2.3.2. Worker exposure Contributing scenario controlling worker exposure (PROC1, PROC2)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,01 mg/m ³	0,001	MEASE
Sum RCR - Long-term - systemic effects		0,001	

2.3.3. Worker exposure Contributing scenario controlling worker exposure (PROC3, PROC6, PROC8b, PROC9, PROC13, PROC14, PROC15, PROC16)

Information for contributing exposure scenario	
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Information for contributing exposure scenario			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,1 mg/m ³	0,01	MEASE
Sum RCR - Long-term - systemic effects		0,01	

2.3.4. Worker exposure Contributing scenario controlling worker exposure (PROC4, PROC5, PROC8a, PROC10, PROC19, PROC21)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,5 mg/m ³	0,05	MEASE
Sum RCR - Long-term - systemic effects		0,05	

2.3.5. Worker exposure Contributing scenario controlling worker exposure (PROC7, PROC17, PROC18)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	1 mg/m ³	0,1	MEASE
Sum RCR - Long-term - systemic effects		0,1	

2.3.6. Worker exposure Contributing scenario controlling worker exposure (PROC22)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	7 mg/m ³	0,7	MEASE
Sum RCR - Long-term - systemic effects		0,7	

2.3.7. Worker exposure Contributing scenario controlling worker exposure (PROC23, PROC25)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	2 mg/m ³	0,2	MEASE
Sum RCR - Long-term - systemic effects		0,2	

2.3.8. Worker exposure Contributing scenario controlling worker exposure (PROC24)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Information for contributing exposure scenario			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5,5 mg/m ³	0,55	MEASE
Sum RCR - Long-term - systemic effects		0,55	

2.3.9. Worker exposure Contributing scenario controlling worker exposure (PROC26)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	1,5 mg/m ³	0,006	MEASE
Sum RCR - Long-term - systemic effects		0,006	

2.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

2.4.1. Environment

Website	https://www.arche-consulting.be/
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2.4.2. Health

Guidance - Health	MEASE model available at: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php
Website	www.ebrc.de/mease.html

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

3. SE3 - Industrial, Manufacture, Formulation; Handling in solid state (Granules, low dust content)

3.1. Title section

Handling in solid state (Granules, low dust content)

ES Ref.: SE3

ES Type: Worker

Association ref code: Manipulation à l'état solide (Granulés, empoussièrément faible)

Environment	Use descriptors
Contributing scenario controlling environmental exposure	ERC4

Worker	Use descriptors
Contributing scenario controlling worker exposure	PROC1
Contributing scenario controlling worker exposure	PROC2
Contributing scenario controlling worker exposure	PROC3, PROC13, PROC14
Contributing scenario controlling worker exposure	PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC16, PROC19
Contributing scenario controlling worker exposure	PROC7, PROC17, PROC18
Contributing scenario controlling worker exposure	PROC15
Contributing scenario controlling worker exposure	PROC22
Contributing scenario controlling worker exposure	PROC23, PROC25
Contributing scenario controlling worker exposure	PROC24
Contributing scenario controlling worker exposure	PROC26

Assessment method	EUSES
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3.2. Conditions of use affecting exposure

3.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC4)

ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
Assessment method	EUSES

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, medium dustiness

3.2.2. Control of worker exposure: Contributing scenario controlling worker exposure (PROC1)

PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
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POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

3.2.3. Control of worker exposure: Contributing scenario controlling worker exposure (PROC2)

PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

3.2.4. Control of worker exposure: Contributing scenario controlling worker exposure (PROC3, PROC13, PROC14)

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC13	Treatment of articles by dipping and pouring
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

3.2.5. Control of worker exposure: Contributing scenario controlling worker exposure (PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC16, PROC19)

PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC6	Calendering operations
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities.
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC10	Roller application or brushing
PROC16	Use of fuels
PROC19	Manual activities involving hand contact

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

3.2.6. Control of worker exposure: Contributing scenario controlling worker exposure (PROC7, PROC17, PROC18)

PROC7	Industrial spraying
PROC17	Lubrication at high energy conditions in metal working operations
PROC18	General greasing /lubrication at high kinetic energy conditions

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Local exhaust ventilation - efficiency of at least	78 %	
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

3.2.7. Control of worker exposure: Contributing scenario controlling worker exposure (PROC15)

PROC15	Use as laboratory reagent
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

3.2.8. Control of worker exposure: Contributing scenario controlling worker exposure (PROC22)

PROC22	Manufacturing and processing of minerals and/or metals at substantially elevated temperature
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Product (article) characteristics	
Physical form of product	Solid, molten form
Concentration of substance in product	100
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

3.2.9. Control of worker exposure: Contributing scenario controlling worker exposure (PROC23, PROC25)

PROC23	Open processing and transfer operations at substantially elevated temperature
PROC25	Other hot work operations with metals

Product (article) characteristics	
Physical form of product	Solid, molten form
Concentration of substance in product	100
Dustiness	Solid, medium dustiness

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

3.2.10. Control of worker exposure: Contributing scenario controlling worker exposure (PROC24)

PROC24	High (mechanical) energy work-up of substances bound in /on materials and/or articles
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures	
Clean equipment and the work area every day	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

3.2.11. Control of worker exposure: Contributing scenario controlling worker exposure (PROC26)

PROC26	Handling of solid inorganic substances at ambient temperature
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

3.3. Exposure estimation and reference to its source

Information for this exposure scenario:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

3.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC4)

Information for contributing exposure scenario		
Required Removal Efficiency (wastewater):	> 99 %	
Release to soil from process	> 1 %	
Air - minimum efficiency of	> 99 %	
Total efficiency of removal from wastewater after onsite and offsite municipal treatment plant) RMMs	> 99 %	

Protection target	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	2,52 mg/l	1,17 mg/l	0,9	EUSES
Marine water	0,57 mg/l	0,12 mg/l	0,2	EUSES
Sewage treatment plant	25,2 mg/l	88,1 mg/l	0,4	EUSES

3.3.2. Worker exposure Contributing scenario controlling worker exposure (PROC1)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,01 mg/m ³	0,001	MEASE
Sum RCR - Long-term - systemic effects		0,001	

3.3.3. Worker exposure Contributing scenario controlling worker exposure (PROC2)

Information for contributing exposure scenario	
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Information for contributing exposure scenario			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,5 mg/m ³	0,05	MEASE
Sum RCR - Long-term - systemic effects		0,05	

3.3.4. Worker exposure Contributing scenario controlling worker exposure (PROC3, PROC13, PROC14)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	1 mg/m ³	0,1	MEASE
Sum RCR - Long-term - systemic effects		0,1	

3.3.5. Worker exposure Contributing scenario controlling worker exposure (PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC16, PROC19)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

3.3.6. Worker exposure Contributing scenario controlling worker exposure (PROC7, PROC17, PROC18)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	4,4 mg/m ³	0,44	MEASE
Sum RCR - Long-term - systemic effects		0,44	

3.3.7. Worker exposure Contributing scenario controlling worker exposure (PROC15)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,5 mg/m ³	0,05	MEASE
Sum RCR - Long-term - systemic effects		0,05	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

3.3.8. Worker exposure Contributing scenario controlling worker exposure (PROC22)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	7 mg/m ³	0,7	MEASE
Sum RCR - Long-term - systemic effects		0,7	

3.3.9. Worker exposure Contributing scenario controlling worker exposure (PROC23, PROC25)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	2 mg/m ³	0,2	MEASE
Sum RCR - Long-term - systemic effects		0,2	

3.3.10. Worker exposure Contributing scenario controlling worker exposure (PROC24)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5,5 mg/m ³	0,55	MEASE
Sum RCR - Long-term - systemic effects		0,55	

3.3.11. Worker exposure Contributing scenario controlling worker exposure (PROC26)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	4 mg/m ³	0,4	MEASE
Sum RCR - Long-term - systemic effects		0,4	

3.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

3.4.1. Environment

Website	https://www.arche-consulting.be/
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3.4.2. Health

Guidance - Health	MEASE model available at: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php
Website	www.ebrc.de/mease.html

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

4. SE4 - Industrial, Manufacture, Formulation; Handling in solid state (Fine powder, high dust content)

4.1. Title section

Handling in solid state (Fine powder, high dust content)

ES Ref.: SE4

ES Type: Worker

Association ref code: Manipulation à l'état solide (Poudre fine, empoussièrement élevé)

Environment	Use descriptors
Contributing scenario controlling environmental exposure	ERC4

Worker	Use descriptors
Contributing scenario controlling worker exposure	PROC1
Contributing scenario controlling worker exposure	PROC2, PROC3
Contributing scenario controlling worker exposure	PROC4, PROC5, PROC6, PROC8b
Contributing scenario controlling worker exposure	PROC7
Contributing scenario controlling worker exposure	PROC8a, PROC17, PROC18
Contributing scenario controlling worker exposure	PROC9
Contributing scenario controlling worker exposure	PROC10, PROC14, PROC16, PROC26
Contributing scenario controlling worker exposure	PROC13, PROC15
Contributing scenario controlling worker exposure	PROC19
Contributing scenario controlling worker exposure	PROC22
Contributing scenario controlling worker exposure	PROC23, PROC25
Contributing scenario controlling worker exposure	PROC24

4.2. Conditions of use affecting exposure

4.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC4)

ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
Assessment method	EUSES

Product (article) characteristics

Physical form of product	Solid
Concentration of substance in product	100

4.2.2. Control of worker exposure: Contributing scenario controlling worker exposure (PROC1)

PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
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POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

4.2.3. Control of worker exposure: Contributing scenario controlling worker exposure (PROC2, PROC3)

PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

4.2.4. Control of worker exposure: Contributing scenario controlling worker exposure (PROC4, PROC5, PROC6, PROC8b)

PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC6	Calendering operations
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities.

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Local exhaust ventilation - efficiency of at least	78 %	
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

4.2.5. Control of worker exposure: Contributing scenario controlling worker exposure (PROC7)

PROC7	Industrial spraying
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures	
Local exhaust ventilation - efficiency of at least	78 %
Clean equipment and the work area every day	
Ensure that direct skin contact is avoided	
Avoid inhalation of the product	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures

Risk management measures are based on qualitative risk characterisation.

Conditions and measures related to personal protection, hygiene and health evaluation

Filtering Half-face mask (DIN EN 149). (FFP1)

Wear eye/face protection

Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training

Wear suitable working clothes

Personal measures have to be applied in case of potential exposure only

Use suitable eye protection and gloves

Other conditions affecting workers exposure

indoor

4.2.6. Control of worker exposure: Contributing scenario controlling worker exposure (PROC8a, PROC17, PROC18)

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
PROC17	Lubrication at high energy conditions in metal working operations
PROC18	General greasing /lubrication at high kinetic energy conditions

Product (article) characteristics

Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure

Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures

Local exhaust ventilation - efficiency of at least	78 %
Clean equipment and the work area every day	
Ensure that direct skin contact is avoided	
Avoid inhalation of the product	
Risk management measures are based on qualitative risk characterisation.	

Conditions and measures related to personal protection, hygiene and health evaluation

Filtering Half-face mask (DIN EN 149). (FFP1)

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

4.2.7. Control of worker exposure: Contributing scenario controlling worker exposure (PROC9)

PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Local exhaust ventilation - efficiency of at least	78 %	
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Other conditions affecting workers exposure

indoor

4.2.8. Control of worker exposure: Contributing scenario controlling worker exposure (PROC10, PROC14, PROC16, PROC26)

PROC10	Roller application or brushing
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC16	Use of fuels
PROC26	Handling of solid inorganic substances at ambient temperature

Product (article) characteristics

Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure

Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures

Local exhaust ventilation - efficiency of at least	78 %
Clean equipment and the work area every day	
Ensure that direct skin contact is avoided	
Avoid inhalation of the product	
Risk management measures are based on qualitative risk characterisation.	

Conditions and measures related to personal protection, hygiene and health evaluation

Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure

indoor

4.2.9. Control of worker exposure: Contributing scenario controlling worker exposure (PROC13, PROC15)

PROC13	Treatment of articles by dipping and pouring
PROC15	Use as laboratory reagent

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

4.2.10. Control of worker exposure: Contributing scenario controlling worker exposure (PROC19)

PROC19	Manual activities involving hand contact
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Use frequency	≤ 5 days/week
Exposure duration	480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Filtering Half-face mask (DIN EN 149). (FFP1)	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

4.2.11. Control of worker exposure: Contributing scenario controlling worker exposure (PROC22)

PROC22	Manufacturing and processing of minerals and/or metals at substantially elevated temperature
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Product (article) characteristics	
Physical form of product	Solid, molten form
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency	≤ 5 days/week
Exposure duration	480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures	
Clean equipment and the work area every day	
Ensure that direct skin contact is avoided	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

4.2.12. Control of worker exposure: Contributing scenario controlling worker exposure (PROC23, PROC25)

PROC23	Open processing and transfer operations at substantially elevated temperature
PROC25	Other hot work operations with metals

Product (article) characteristics	
Physical form of product	Solid, molten form
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

4.2.13. Control of worker exposure: Contributing scenario controlling worker exposure (PROC24)

PROC24	High (mechanical) energy work-up of substances bound in /on materials and/or articles
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Avoid inhalation of the product		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	

Other conditions affecting workers exposure	
indoor	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

4.3. Exposure estimation and reference to its source

Information for this exposure scenario:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

4.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC4)

Information for contributing exposure scenario		
As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed		
Required Removal Efficiency (wastewater):	> 99 %	
Release to soil from process	> 1 %	
Air - minimum efficiency of	> 99 %	
Total efficiency of removal from wastewater after onsite and offsite municipal treatment plant) RMMs	> 99 %	

Protection target	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	2,52	1,17 mg/l	0,9	EUSES
Marine water	0,57	0,12 mg/l	0,2	EUSES
Sewage treatment plant	25,2 mg/l	88,1 mg/l	0,4	EUSES

4.3.2. Worker exposure Contributing scenario controlling worker exposure (PROC1)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,01 mg/m ³	0,001	MEASE
Sum RCR - Long-term - systemic effects		0,001	

4.3.3. Worker exposure Contributing scenario controlling worker exposure (PROC2, PROC3)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	1 mg/m ³	0,1	MEASE
Sum RCR - Long-term - systemic effects		0,1	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

4.3.4. Worker exposure Contributing scenario controlling worker exposure (PROC4, PROC5, PROC6, PROC8b)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5,5 mg/m ³	0,55	MEASE
Sum RCR - Long-term - systemic effects		0,55	

4.3.5. Worker exposure Contributing scenario controlling worker exposure (PROC7)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5,5 mg/m ³	0,55	MEASE
Sum RCR - Long-term - systemic effects		0,55	

4.3.6. Worker exposure Contributing scenario controlling worker exposure (PROC8a, PROC17, PROC18)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	2,75 mg/m ³	0,275	MEASE
Sum RCR - Long-term - systemic effects		0,275	

4.3.7. Worker exposure Contributing scenario controlling worker exposure (PROC9)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	4,4 mg/m ³	0,44	MEASE
Sum RCR - Long-term - systemic effects		0,44	

4.3.8. Worker exposure Contributing scenario controlling worker exposure (PROC10, PROC14, PROC16, PROC26)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	2,2 mg/m ³	0,22	MEASE
Sum RCR - Long-term - systemic effects		0,22	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

4.3.9. Worker exposure Contributing scenario controlling worker exposure (PROC13, PROC15)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

4.3.10. Worker exposure Contributing scenario controlling worker exposure (PROC19)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	6,25 mg/m ³	0,625	MEASE
Sum RCR - Long-term - systemic effects		0,625	

4.3.11. Worker exposure Contributing scenario controlling worker exposure (PROC22)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	7 mg/m ³	0,7	MEASE
Sum RCR - Long-term - systemic effects		0,7	

4.3.12. Worker exposure Contributing scenario controlling worker exposure (PROC23, PROC25)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	2 mg/m ³	0,2	MEASE
Sum RCR - Long-term - systemic effects		0,2	

4.3.13. Worker exposure Contributing scenario controlling worker exposure (PROC24)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5,5 mg/m ³	0,55	MEASE
Sum RCR - Long-term - systemic effects		0,55	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

4.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.4.1. Environment

Website	https://www.arche-consulting.be/
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4.4.2. Health

Guidance - Health	MEASE model available at: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php
Website	www.ebrc.de/mease.html

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

5. SE5 - Professional; Handling in solid state in solution - liquid products

5.1. Title section

Handling in solid state in solution - liquid products

ES Ref.: SE5

ES Type: Worker

Association ref code: Manipulation à l'état solide en solution - produits liquides

Environment		Use descriptors
	Contributing scenario controlling environmental exposure	ERC4

Worker		Use descriptors
	Contributing scenario controlling worker exposure	PROC2, PROC12, PROC20
	Contributing scenario controlling worker exposure	PROC3, PROC15
	Contributing scenario controlling worker exposure	PROC4, PROC5, PROC14
	Contributing scenario controlling worker exposure	PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC19
	Contributing scenario controlling worker exposure	PROC11
	Contributing scenario controlling worker exposure	PROC16, PROC18
	Contributing scenario controlling worker exposure	PROC17

Assessment method	EUSES
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5.2. Conditions of use affecting exposure

5.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC4)

ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
Assessment method	EUSES

Product (article) characteristics	
Physical form of product	Solid, pasty
Concentration of substance in product	100

5.2.2. Control of worker exposure: Contributing scenario controlling worker exposure (PROC2, PROC12, PROC20)

PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC12	Use of blowing agents in manufacture of foam
PROC20	Use of functional fluids in small devices

Product (article) characteristics	
Physical form of product	Solid, pasty

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

5.2.3. Control of worker exposure: Contributing scenario controlling worker exposure (PROC3, PROC15)

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC15	Use as laboratory reagent

Product (article) characteristics	
Physical form of product	Solid, pasty

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

5.2.4. Control of worker exposure: Contributing scenario controlling worker exposure (PROC4, PROC5, PROC14)

PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation

Product (article) characteristics	
Physical form of product	Solid, pasty

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

5.2.5. Control of worker exposure: Contributing scenario controlling worker exposure (PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC19)

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities.
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC10	Roller application or brushing
PROC13	Treatment of articles by dipping and pouring
PROC19	Manual activities involving hand contact

Product (article) characteristics	
Physical form of product	Solid, pasty

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

5.2.6. Control of worker exposure: Contributing scenario controlling worker exposure (PROC11)

PROC11	Non industrial spraying
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Product (article) characteristics	
Physical form of product	Solid, pasty

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Filtering Half-face mask (DIN EN 149). (FFP1)	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

5.2.7. Control of worker exposure: Contributing scenario controlling worker exposure (PROC16, PROC18)

PROC16	Use of fuels
PROC18	General greasing /lubrication at high kinetic energy conditions

Product (article) characteristics	
Physical form of product	Solid, pasty

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

5.2.8. Control of worker exposure: Contributing scenario controlling worker exposure (PROC17)

PROC17	Lubrication at high energy conditions in metal working operations
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Product (article) characteristics	
Physical form of product	Solid, pasty

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Use frequency	≤ 5 days/week
Exposure duration	480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

5.3. Exposure estimation and reference to its source

Information for this exposure scenario:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

5.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC4)

Information for contributing exposure scenario		
As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed		
Required Removal Efficiency (wastewater):	> 99 %	
Release to soil from process	> 1 %	
Air - minimum efficiency of	> 99 %	
Total efficiency of removal from wastewater after onsite and offsite municipal treatment plant) RMMs	> 99 %	

Protection target	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	2,52	1,17 mg/l	0,9	EUSES

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Protection target	Exposure estimation	PNEC	RCR	Assessment method
Marine water	0,57	0,12 mg/l	0,2	EUSES
Sewage treatment plant	25,2 mg/l	88,1 mg/l	0,4	EUSES

5.3.2. Worker exposure Contributing scenario controlling worker exposure (PROC2, PROC12, PROC20)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,001 mg/m ³	< 0,001	MEASE
Sum RCR - Long-term - systemic effects		< 0,001	

5.3.3. Worker exposure Contributing scenario controlling worker exposure (PROC3, PROC15)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,01 mg/m ³	0,001	MEASE
Sum RCR - Long-term - systemic effects		0,001	

5.3.4. Worker exposure Contributing scenario controlling worker exposure (PROC4, PROC5, PROC14)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,1 mg/m ³	0,01	MEASE
Sum RCR - Long-term - systemic effects		0,01	

5.3.5. Worker exposure Contributing scenario controlling worker exposure (PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC19)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,05 mg/m ³	0,005	MEASE
Sum RCR - Long-term - systemic effects		0,005	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

5.3.6. Worker exposure Contributing scenario controlling worker exposure (PROC11)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

5.3.7. Worker exposure Contributing scenario controlling worker exposure (PROC16, PROC18)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,5 mg/m ³	0,05	MEASE
Sum RCR - Long-term - systemic effects		0,05	

5.3.8. Worker exposure Contributing scenario controlling worker exposure (PROC17)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	1 mg/m ³	0,1	MEASE
Sum RCR - Long-term - systemic effects		0,1	

5.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

5.4.1. Environment

Website	https://www.arche-consulting.be/
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5.4.2. Health

Guidance - Health	MEASE model available at: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php
Website	www.ebrc.de/mease.html

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

6. SE6 - Professional; Handling in solid state (Granules, low dust content)

6.1. Title section

Handling in solid state (Granules, low dust content)

ES Ref.: SE6

ES Type: Worker

Association ref code: Manipulation à l'état solide (Granulés, empoussièrement faible)

Environment	Use descriptors
Contributing scenario controlling environmental exposure	ERC4

Worker	Use descriptors
Contributing scenario controlling worker exposure	PROC2
Contributing scenario controlling worker exposure	PROC3, PROC15
Contributing scenario controlling worker exposure	PROC4, PROC5, PROC6, PROC11, PROC14
Contributing scenario controlling worker exposure	PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC19, PROC21
Contributing scenario controlling worker exposure	PROC16, PROC18
Contributing scenario controlling worker exposure	PROC17
Contributing scenario controlling worker exposure	PROC22
Contributing scenario controlling worker exposure	PROC23
Contributing scenario controlling worker exposure	PROC24
Contributing scenario controlling worker exposure	PROC25
Contributing scenario controlling worker exposure	PROC26

Assessment method	EUSES
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6.2. Conditions of use affecting exposure

6.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC4)

ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
Assessment method	EUSES

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100

6.2.2. Control of worker exposure: Contributing scenario controlling worker exposure (PROC2)

PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
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POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

6.2.3. Control of worker exposure: Contributing scenario controlling worker exposure (PROC3, PROC15)

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC15	Use as laboratory reagent

Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

6.2.4. Control of worker exposure: Contributing scenario controlling worker exposure (PROC4, PROC5, PROC6, PROC11, PROC14)

PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC6	Calendering operations
PROC11	Non industrial spraying
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation

Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

6.2.5. Control of worker exposure: Contributing scenario controlling worker exposure (PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC19, PROC21)

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities.
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC10	Roller application or brushing
PROC13	Treatment of articles by dipping and pouring
PROC19	Manual activities involving hand contact
PROC21	Low energy manipulation and handling of substances bound in/on materials or articles

Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

6.2.6. Control of worker exposure: Contributing scenario controlling worker exposure (PROC16, PROC18)

PROC16	Use of fuels
PROC18	General greasing /lubrication at high kinetic energy conditions

Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

6.2.7. Control of worker exposure: Contributing scenario controlling worker exposure (PROC17)

PROC17	Lubrication at high energy conditions in metal working operations
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Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Filtering Half-face mask (DIN EN 149). (FFP1)	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Other conditions affecting workers exposure	
indoor	

6.2.8. Control of worker exposure: Contributing scenario controlling worker exposure (PROC22)

PROC22	Manufacturing and processing of minerals and/or metals at substantially elevated temperature
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Product (article) characteristics	
Physical form of product	Solid, molten form
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Filtering Half-face mask (DIN EN 149). (FFP1)	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

6.2.9. Control of worker exposure: Contributing scenario controlling worker exposure (PROC23)

PROC23	Open processing and transfer operations at substantially elevated temperature
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POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Product (article) characteristics	
Physical form of product	Solid, molten form
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

6.2.10. Control of worker exposure: Contributing scenario controlling worker exposure (PROC24)

PROC24	High (mechanical) energy work-up of substances bound in /on materials and/or articles
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Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

6.2.11. Control of worker exposure: Contributing scenario controlling worker exposure (PROC25)

PROC25	Other hot work operations with metals
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Product (article) characteristics	
Physical form of product	Solid, molten form
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

6.2.12. Control of worker exposure: Contributing scenario controlling worker exposure (PROC26)

PROC26	Handling of solid inorganic substances at ambient temperature
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Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, low dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Other conditions affecting workers exposure	
indoor	

6.3. Exposure estimation and reference to its source

Information for this exposure scenario:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

6.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC4)

Information for contributing exposure scenario		
As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed		
Required Removal Efficiency (wastewater):	> 99 %	
Release to soil from process	> 1 %	
Air - minimum efficiency of	> 99 %	
Total efficiency of removal from wastewater after onsite and offsite municipal treatment plant) RMMs	> 99 %	

Protection target	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	2,52	1,17 mg/l	0,9	EUSES
Marine water	0,57	0,12 mg/l	0,2	EUSES
Sewage treatment plant	25,2 mg/l	88,1 mg/l	0,4	EUSES

6.3.2. Worker exposure Contributing scenario controlling worker exposure (PROC2)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,01 mg/m ³	0,001	MEASE
Sum RCR - Long-term - systemic effects		0,001	

6.3.3. Worker exposure Contributing scenario controlling worker exposure (PROC3, PROC15)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,1 mg/m ³	0,01	MEASE

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Information for contributing exposure scenario			
Sum RCR - Long-term - systemic effects		0,01	

6.3.4. Worker exposure Contributing scenario controlling worker exposure (PROC4, PROC5, PROC6, PROC11, PROC14)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	1 mg/m ³	0,1	MEASE
Sum RCR - Long-term - systemic effects		0,1	

6.3.5. Worker exposure Contributing scenario controlling worker exposure (PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC19, PROC21)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,5 mg/m ³	0,05	MEASE
Sum RCR - Long-term - systemic effects		0,05	

6.3.6. Worker exposure Contributing scenario controlling worker exposure (PROC16, PROC18)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

6.3.7. Worker exposure Contributing scenario controlling worker exposure (PROC17)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	2,5 mg/m ³	0,25	MEASE
Sum RCR - Long-term - systemic effects		0,25	

6.3.8. Worker exposure Contributing scenario controlling worker exposure (PROC22)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Information for contributing exposure scenario			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	2,5 mg/m ³	0,25	MEASE
Sum RCR - Long-term - systemic effects		0,25	

6.3.9. Worker exposure Contributing scenario controlling worker exposure (PROC23)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

6.3.10. Worker exposure Contributing scenario controlling worker exposure (PROC24)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5,5 mg/m ³	0,55	MEASE
Sum RCR - Long-term - systemic effects		0,55	

6.3.11. Worker exposure Contributing scenario controlling worker exposure (PROC25)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	4 mg/m ³	0,4	MEASE
Sum RCR - Long-term - systemic effects		0,4	

6.3.12. Worker exposure Contributing scenario controlling worker exposure (PROC26)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	3 mg/m ³	0,3	MEASE
Sum RCR - Long-term - systemic effects		0,3	

6.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

6.4.1. Environment

Website	https://www.arche-consulting.be/
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POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

6.4.2. Health

Guidance - Health	MEASE model available at: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php
Website	www.ebrc.de/mease.html

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

7. SE7 - Professional; Handling in solid state (Medium fine powder, medium dusting)

7.1. Title section

Handling in solid state (Medium fine powder, medium dusting)

ES Ref.: SE7

ES Type: Worker

Association ref code: Manipulation à l'état solide (Poudre mi-fine, empoussièrement moyen)

Environment	Use descriptors
Contributing scenario controlling environmental exposure	ERC4

Worker	Use descriptors
Contributing scenario controlling worker exposure	PROC2, PROC3
Contributing scenario controlling worker exposure	PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC19
Contributing scenario controlling worker exposure	PROC11, PROC16
Contributing scenario controlling worker exposure	PROC15
Contributing scenario controlling worker exposure	PROC17, PROC18
Contributing scenario controlling worker exposure	PROC22
Contributing scenario controlling worker exposure	PROC23
Contributing scenario controlling worker exposure	PROC24
Contributing scenario controlling worker exposure	PROC25
Contributing scenario controlling worker exposure	PROC26

Assessment method	EUSES
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7.2. Conditions of use affecting exposure

7.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC4)

ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
Assessment method	EUSES

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100

7.2.2. Control of worker exposure: Contributing scenario controlling worker exposure (PROC2, PROC3)

PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
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POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
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Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

7.2.3. Control of worker exposure: Contributing scenario controlling worker exposure (PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC19)

PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC6	Calendering operations
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities.
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC10	Roller application or brushing

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

PROC13	Treatment of articles by dipping and pouring
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC19	Manual activities involving hand contact

Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

7.2.4. Control of worker exposure: Contributing scenario controlling worker exposure (PROC11, PROC16)

PROC11	Non industrial spraying
PROC16	Use of fuels

Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, medium dustiness

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Filtering Half-face mask (DIN EN 149). (FFP1)	

Other conditions affecting workers exposure	
indoor	

7.2.5. Control of worker exposure: Contributing scenario controlling worker exposure (PROC15)

PROC15	Use as laboratory reagent
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Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

7.2.6. Control of worker exposure: Contributing scenario controlling worker exposure (PROC17, PROC18)

PROC17	Lubrication at high energy conditions in metal working operations
PROC18	General greasing /lubrication at high kinetic energy conditions

Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Filtering Half-face mask (DIN EN 149). (FFP2)	

Other conditions affecting workers exposure	
indoor	

7.2.7. Control of worker exposure: Contributing scenario controlling worker exposure (PROC22)

PROC22	Manufacturing and processing of minerals and/or metals at substantially elevated temperature
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Product (article) characteristics	
Physical form of product	Solid, molten form
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Filtering Half-face mask (DIN EN 149). (FFP1)	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Other conditions affecting workers exposure	
indoor	

7.2.8. Control of worker exposure: Contributing scenario controlling worker exposure (PROC23)

PROC23	Open processing and transfer operations at substantially elevated temperature
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Product (article) characteristics	
Physical form of product	Solid, molten form
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

7.2.9. Control of worker exposure: Contributing scenario controlling worker exposure (PROC24)

PROC24	High (mechanical) energy work-up of substances bound in /on materials and/or articles
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Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, medium dustiness

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

7.2.10. Control of worker exposure: Contributing scenario controlling worker exposure (PROC25)

PROC25	Other hot work operations with metals
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Product (article) characteristics	
Physical form of product	Solid, molten form
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

7.2.11. Control of worker exposure: Contributing scenario controlling worker exposure (PROC26)

PROC26	Handling of solid inorganic substances at ambient temperature
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Product (article) characteristics	
Physical form of product	Solid
Dustiness	Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

7.3. Exposure estimation and reference to its source

Information for this exposure scenario:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

7.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC4)

Information for contributing exposure scenario		
As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed		
Required Removal Efficiency (wastewater):	> 99 %	
Release to soil from process	> 1 %	
Air - minimum efficiency of	> 99 %	
Total efficiency of removal from wastewater after onsite and offsite municipal treatment plant) RMMs	> 99 %	

Protection target	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	2,52	1,17 mg/l	0,9	EUSES
Marine water	0,57	0,12 mg/l	0,2	EUSES
Sewage treatment plant	25,2 mg/l	88,1 mg/l	0,4	EUSES

7.3.2. Worker exposure Contributing scenario controlling worker exposure (PROC2, PROC3)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	1 mg/m ³	0,1	MEASE
Sum RCR - Long-term - systemic effects		0,1	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

7.3.3. Worker exposure Contributing scenario controlling worker exposure (PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC19)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

7.3.4. Worker exposure Contributing scenario controlling worker exposure (PROC11, PROC16)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

7.3.5. Worker exposure Contributing scenario controlling worker exposure (PROC15)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	0,5 mg/m ³	0,05	MEASE
Sum RCR - Long-term - systemic effects		0,05	

7.3.6. Worker exposure Contributing scenario controlling worker exposure (PROC17, PROC18)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

7.3.7. Worker exposure Contributing scenario controlling worker exposure (PROC22)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	2,5 mg/m ³	0,25	MEASE
Sum RCR - Long-term - systemic effects		0,25	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

7.3.8. Worker exposure Contributing scenario controlling worker exposure (PROC23)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

7.3.9. Worker exposure Contributing scenario controlling worker exposure (PROC24)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5,5 mg/m ³	5,5	MEASE
Sum RCR - Long-term - systemic effects		5,5	

7.3.10. Worker exposure Contributing scenario controlling worker exposure (PROC25)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	4 mg/m ³	0,4	MEASE
Sum RCR - Long-term - systemic effects		0,4	

7.3.11. Worker exposure Contributing scenario controlling worker exposure (PROC26)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	8 mg/m ³	0,8	MEASE
Sum RCR - Long-term - systemic effects		0,8	

7.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

7.4.1. Environment

Website	https://www.arche-consulting.be/
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7.4.2. Health

Guidance - Health	MEASE model available at: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php
Website	www.ebrc.de/mease.html

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

8. SE8 - Professional; Handling in solid state (Fine powder, high dust content)

8.1. Title section

Handling in solid state (Fine powder, high dust content)

ES Ref.: SE8

ES Type: Worker

Association ref code: Manipulation à l'état solide (Poudre fine, empoussièrement élevé)

Environment	Use descriptors
Contributing scenario controlling environmental exposure	ERC4

Worker	Use descriptors
Contributing scenario controlling worker exposure	PROC2, PROC3, PROC13, PROC15
Contributing scenario controlling worker exposure	PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC14, PROC16, PROC19
Contributing scenario controlling worker exposure	PROC9, PROC26
Contributing scenario controlling worker exposure	PROC10
Contributing scenario controlling worker exposure	PROC11, PROC17, PROC18
Contributing scenario controlling worker exposure	PROC22
Contributing scenario controlling worker exposure	PROC23
Contributing scenario controlling worker exposure	PROC24
Contributing scenario controlling worker exposure	PROC25

Assessment method	EUSES
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8.2. Conditions of use affecting exposure

8.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC4)

ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
Assessment method	EUSES

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

8.2.2. Control of worker exposure: Contributing scenario controlling worker exposure (PROC2, PROC3, PROC13, PROC15)

PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

PROC13	Treatment of articles by dipping and pouring
PROC15	Use as laboratory reagent

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

8.2.3. Control of worker exposure: Contributing scenario controlling worker exposure (PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC14, PROC16, PROC19)

PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC6	Calendering operations
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities.
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

PROC16	Use of fuels
PROC19	Manual activities involving hand contact

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Filtering Half-face mask (DIN EN 149). (FFP2)	

Other conditions affecting workers exposure	
indoor	

8.2.4. Control of worker exposure: Contributing scenario controlling worker exposure (PROC9, PROC26)

PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC26	Handling of solid inorganic substances at ambient temperature

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Product (article) characteristics	
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Filtering Half-face mask (DIN EN 149). (FFP1)	

Other conditions affecting workers exposure	
indoor	

8.2.5. Control of worker exposure: Contributing scenario controlling worker exposure (PROC10)

PROC10	Roller application or brushing
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Amount used (or contained in articles), frequency and duration of use/exposure	
Use frequency	≤ 5 days/week
Exposure duration	480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Filtering Half-face mask (DIN EN 149). (FFP1)	

Other conditions affecting workers exposure	
indoor	

8.2.6. Control of worker exposure: Contributing scenario controlling worker exposure (PROC11, PROC17, PROC18)

PROC11	Non industrial spraying
PROC17	Lubrication at high energy conditions in metal working operations
PROC18	General greasing /lubrication at high kinetic energy conditions

Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency	≤ 5 days/week
Exposure duration	60 minutes
Exposure duration	< 1 h/day

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Filtering Half-face mask (DIN EN 149). (FFP2)	

Other conditions affecting workers exposure	
indoor	

8.2.7. Control of worker exposure: Contributing scenario controlling worker exposure (PROC22)

PROC22	Manufacturing and processing of minerals and/or metals at substantially elevated temperature
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	
Filtering Half-face mask (DIN EN 149). (FFP1)	

Other conditions affecting workers exposure	
indoor	

8.2.8. Control of worker exposure: Contributing scenario controlling worker exposure (PROC23)

PROC23	Open processing and transfer operations at substantially elevated temperature
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Product (article) characteristics	
Physical form of product	Solid, molten form
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Other conditions affecting workers exposure	
indoor	

8.2.9. Control of worker exposure: Contributing scenario controlling worker exposure (PROC24)

PROC24	High (mechanical) energy work-up of substances bound in /on materials and/or articles
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Product (article) characteristics	
Physical form of product	Solid
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

8.2.10. Control of worker exposure: Contributing scenario controlling worker exposure (PROC25)

PROC25	Other hot work operations with metals
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Product (article) characteristics	
Physical form of product	Solid, molten form

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Product (article) characteristics	
Concentration of substance in product	100
Dustiness	Solid, high dustiness

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 0 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 100 Percentage of risk driving substance contained in product:
Use frequency Exposure duration	≤ 5 days/week 480 minutes
Exposure duration	< 8 h/day

Technical and organisational conditions and measures		
Avoid inhalation of the product		
Clean equipment and the work area every day		
Ensure that direct skin contact is avoided		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
indoor	

8.3. Exposure estimation and reference to its source

Information for this exposure scenario:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

8.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC4)

Information for contributing exposure scenario		
As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed		
Required Removal Efficiency (wastewater):	> 99 %	
Release to soil from process	> 1 %	
Air - minimum efficiency of	> 99 %	
Total efficiency of removal from wastewater after onsite and offsite municipal treatment plant) RMMs	> 99 %	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Protection target	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	2,52	1,17 mg/l	0,9	EUSES
Marine water	0,57	0,12 mg/l	0,2	EUSES
Sewage treatment plant	25,2 mg/l	88,1 mg/l	0,4	EUSES

8.3.2. Worker exposure Contributing scenario controlling worker exposure (PROC2, PROC3, PROC13, PROC15)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

8.3.3. Worker exposure Contributing scenario controlling worker exposure (PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC14, PROC16, PROC19)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

8.3.4. Worker exposure Contributing scenario controlling worker exposure (PROC9, PROC26)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

8.3.5. Worker exposure Contributing scenario controlling worker exposure (PROC10)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Information for contributing exposure scenario			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	2,5 mg/m ³	2,5	MEASE
Sum RCR - Long-term - systemic effects		2,5	

8.3.6. Worker exposure Contributing scenario controlling worker exposure (PROC11, PROC17, PROC18)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	4 mg/m ³	0,4	MEASE
Sum RCR - Long-term - systemic effects		0,4	

8.3.7. Worker exposure Contributing scenario controlling worker exposure (PROC22)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	2,5 mg/m ³	0,25	MEASE
Sum RCR - Long-term - systemic effects		0,25	

8.3.8. Worker exposure Contributing scenario controlling worker exposure (PROC23)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5 mg/m ³	0,5	MEASE
Sum RCR - Long-term - systemic effects		0,5	

8.3.9. Worker exposure Contributing scenario controlling worker exposure (PROC24)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	5,5 mg/m ³	0,55	MEASE
Sum RCR - Long-term - systemic effects		0,55	

8.3.10. Worker exposure Contributing scenario controlling worker exposure (PROC25)

Information for contributing exposure scenario			
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects			

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Information for contributing exposure scenario

Route of exposure and type of effects	Exposure estimate	RCR	Method
Inhalation - Long-term - systemic effects	4 mg/m ³	0,4	MEASE
Sum RCR - Long-term - systemic effects		0,4	

8.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

8.4.1. Environment

Website	https://www.arche-consulting.be/
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8.4.2. Health

Guidance - Health	MEASE model available at: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php
Website	www.ebrc.de/mease.html

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

9. SE9 - Consumer; Use in photographic applications

9.1. Title section

Use in photographic applications

ES Ref.: SE9

ES Type: Worker

Association ref code: Utilisation dans les applications photographiques

Environment	Use descriptors
Contributing scenario controlling environmental exposure	ERC4

Worker	Use descriptors
Contributing scenario controlling worker exposure	

Assessment method	EUSES
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9.2. Conditions of use affecting exposure

9.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC4)

ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
Assessment method	EUSES

Product (article) characteristics	
Physical form of product	Liquid
Concentration of substance in product	100

9.2.2. Control of worker exposure: Contributing scenario controlling worker exposure

Product (article) characteristics	
Physical form of product	Liquid

Amount used (or contained in articles), frequency and duration of use/exposure	
Amount per use	≥ 10 L/day Percentage of risk driving substance contained in product:
Amount per use	≤ 20 Percentage of risk driving substance contained in product:
Exposure duration	< 15 min/day

Technical and organisational conditions and measures	
Always wash your hands immediately after handling this product, and once again before leaving the workplace	
Avoid direct eye contact with product, also via contamination on hands	
In case of contact, immediately rinse eyes with plenty of water for at least 15 minutes	
Clean equipment and the work area every day	
Store substance within a closed system	
Keep locked up and out of reach of children	

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Technical and organisational conditions and measures		
Risk management measures are based on qualitative risk characterisation.		

Conditions and measures related to personal protection, hygiene and health evaluation	
Personal measures have to be applied in case of potential exposure only	
Use suitable eye protection and gloves	
Wear eye/face protection	
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training	
Wear suitable working clothes	

Other conditions affecting workers exposure	
Assumes that potential dermal contact is limited to fingertips.	36 cm ²
Palm of both hands	430 cm ²
Both hands	820 cm ²
indoor	

9.3. Exposure estimation and reference to its source

Information for this exposure scenario:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

9.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC4)

Information for contributing exposure scenario		
As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed		
Release to soil from process	0 %	
Release to air from process	< 0,1	
Release to waste water from process	< 2 %	
Total efficiency of removal from wastewater after onsite and offsite municipal treatment plant) RMMs	0,99 %	

Protection target	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	0,01	1,17 mg/l	< 0,01	EUSES
Marine water	0,001	0,12 mg/l	< 0,01	EUSES

POTASSIUM METABISULPHITE

Annex to the safety data sheet: Exposure scenario

CAS-No.: 16731-55-8 Product form: Substance Physical state: Solid Substance type: Mono-constituent

Protection target	Exposure estimation	PNEC	RCR	Assessment method
Sewage treatment plant	0,0001 mg/l	88,1 mg/l	< 0,01	EUSES

9.3.2. Worker exposure Contributing scenario controlling worker exposure

Information for contributing exposure scenario
Available hazard data do not enable the derivation of a DNEL for dermal irritant effects

9.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

9.4.1. Environment

Website	https://www.arche-consulting.be/
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9.4.2. Health

Guidance - Health	MEASE model available at: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php
Website	www.ebrc.de/mease.html