

**SECTION 1: Identification of the substance/mixture and of the company/
undertaking****1.1 Product identifier****Trade name:** SODIUM HYDROSULFITE S**Material code:** 002605**CAS Number:**

7775-14-6

EC number:

231-890-0

Index number:

016-028-00-1

Registration number: 01-2119520510-57**1.2 Relevant identified uses of the substance or mixture and uses advised against****Sector of Use**

SU2a Mining, (without offshore industries)

SU2b Offshore industries

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU4 Manufacture of food products

SU5 Manufacture of textiles, leather, fur

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

SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

SU11 Manufacture of rubber products

SU12 Manufacture of plastics products, including compounding and conversion

SU14 Manufacture of basic metals, including alloys

SU15 Manufacture of fabricated metal products, except machinery and equipment

SU16 Manufacture of computer, electronic and optical products, electrical equipment

SU17 General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment

SU20 Health services

SU23 Electricity, steam, gas water supply and sewage treatment

Product category

PC1 Adhesives, sealants

PC2 Adsorbents

PC3 Air care products

PC4 Anti-Freeze and de-icing products

PC7 Base metals and alloys

PC8 Biocidal products

PC9a Coatings and paints, thinners, paint removers

PC9b Fillers, putties, plasters, modelling clay

PC13 Fuels

PC14 Metal surface treatment products

PC15 Non-metal-surface treatment products

PC17 Hydraulic fluids

PC18 Ink and toners

PC19 Intermediate

PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents

PC23 Leather treatment products

PC24 Lubricants, greases, release products

PC25 Metal working fluids

PC26 Paper and board treatment products

PC28 Perfumes, fragrances

PC29 Pharmaceuticals

PC30 Photo-chemicals

PC31 Polishes and wax blends

PC32 Polymer preparations and compounds

PC34 Textile dyes, and impregnating products



Trade name: SODIUM HYDROSULFITE S

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- PC35 Washing and cleaning products (including solvent based products)
- PC37 Water treatment chemicals
- PC38 Welding and soldering products, flux products
- PC39 Cosmetics, personal care products
- PC40 Extraction agents

Process category

- 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
- 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 mixture into small containers (dedicated filling line, including weighing)
- PROC10 Roller application or brushing
- PROC13 Treatment of articles by dipping and pouring
- PROC14 Tableting, compression, extrusion, pelletisation, granulation
- 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
- 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

Environmental release category

- ERC1 Manufacture of the substance
- ERC6a Use of intermediate
- ERC6b Use of reactive processing aid at industrial site (no inclusion into or onto article)
- ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
- ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor)

Application of the substance / the mixture

- Chemical production
- Textile auxiliary
- Reducing agent

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

L. Brüggemann GmbH & Co. KG
 Salzstraße 131
 74076 Heilbronn
 Fon: +49 7131 1575-0
 Fax: +49 7131 1575-25-111
 E-Mail: info@brueggemann.com

Further information obtainable from: ehs@brueggemann.com

1.4 Emergency telephone number: +49 761 19240 (english language)

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Trade name: SODIUM HYDROSULFITE S

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Self-heat. 1 H251 Self-heating: may catch fire.

Acute Tox. 4 H302 Harmful if swallowed.

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02 GHS07

Signal word Danger

Hazard-determining components of labelling:

sodium dithionite

Hazard statements

H251 Self-heating: may catch fire.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

Precautionary statements

P235+P410 Keep cool. Protect from sunlight.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

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

P420 Store separately.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH031 Contact with acids liberates toxic gas.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Does not meet the PBT criteria according to annex XIII of Regulation (EC) No 1907/2006.

vPvB: Does not meet the vPvB criteria according to annex XIII of Regulation (EC) No 1907/2006.

SECTION 3: Composition/information on ingredients

Chemical characterisation: Substances

CAS NO. Description:

7775-14-6 sodium dithionite

Identification number(s)

EC number: 231-890-0

Index number: 016-028-00-1

Dangerous components:

CAS: 7775-14-6	sodium dithionite	>88%
EINECS: 231-890-0	Self-heat. 1, H251; Acute Tox. 4, H302; Eye Irrit. 2, H319	
Index number: 016-028-00-1		
Reg.nr.: 01-2119520510-57		

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Trade name: SODIUM HYDROSULFITE S

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CAS: 497-19-8	sodium carbonate	<5%
EINECS: 207-838-8	Eye Irrit. 2, H319	
Index number: 011-005-00-2		
Reg.nr.: 01-2119485498-19		

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Take affected persons out of danger area and lay down.
Personal protection for the First Aider.
Remove contaminated clothing

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.
Seek medical treatment.

After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness of breath and difficulty breathing, the onset of which may be delayed.

4.3 Indication of any immediate medical attention and special treatment needed

Treat according to symptoms (decontamination, vital functions)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

Carbon dioxide
Fire-extinguishing powder
Water in copious quantities

For safety reasons unsuitable extinguishing agents:

Water haze
Water spray

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Sulphur dioxide (SO₂)

5.3 Advice for firefighters

Protective equipment:

Mouth respiratory protective device.
Wear fully protective suit.

Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

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Trade name: **SODIUM HYDROSULFITE S**

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SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective clothing.

Avoid contact with the eyes and skin.

Use respiratory protective device against the effects of fumes/dust/aerosol.

6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Keep contaminated washing water and dispose of appropriately.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

The usual precautionary measures are to be adhered to when handling chemicals.

Ensure good ventilation/exhaustion at the workplace.

Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.

Do not open warm or swollen product containers. Remove persons to safety and alert fire brigade.

Information about fire - and explosion protection:

Protect from heat.

Substance/product is self ignitable.

7.2 Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:**

Store only in unopened original receptacles.

Store in cool, dry conditions in well sealed receptacles.

Protect from humidity and water.

Information about storage in one common storage facility:

Do not store together with oxidising and acidic materials.

Store away from foodstuffs.

Storage class: 4.2**7.3 Specific end use(s)** No further relevant information available.**SECTION 8: Exposure controls/personal protection****Additional information about design of technical facilities:** No further data; see item 7.**8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:** Not required.**DNELs**

The nuisance dust limit (inhalativ fraction) was used as basis for the DNEL.

7775-14-6 sodium dithioniteOral syst. 7.9 mg/kg_{bw}/d (consumer, long-term)Inhalative syst. 61 mg/m³ (consumer, long-term)206 mg/m³ (worker, long-term)

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PNECs**7775-14-6 sodium dithionite**

Aquatic 1 mg/L (Freshwater)
 0.1 mg/L (Marine Water)
 sewage plant 45.3 mg/l (Freshwater)

8.2 Exposure controls**Personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.
 Do not eat or drink while working.
 Keep away from foodstuffs, beverages and feed.
 Wash hands before breaks and at the end of work.

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Breathing apparatus with filter (ABEK, EN 14387). Appropriate self-contained breathing apparatus may be required.

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.



Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Nitrile rubber, NBR
 Recommended thickness of the material: ≥ 0.4 mm

Penetration time of glove material

Value for the permeation: Level ≤ 8 h
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Not suitable are gloves made of the following materials: Leather gloves

Eye protection:

Tightly sealed goggles

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties
9.1 Information on basic physical and chemical properties**General Information****Appearance:**

Form: Powder
Colour: White
Odour: Pungent

pH-value (50 g/l) at 20 °C: 8-10.5 (DIN 53 785)

Initial boiling point and boiling range: Not applicable.

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Trade name: SODIUM HYDROSULFITE S

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Flash point:	Not applicable.
Decomposition temperature:	>80 °C
Auto-ignition temperature:	> 80° C Autoignition under the influence of humidity or small amounts of water.
Explosive properties:	Product does not present an explosion hazard.
Vapour pressure at 20 °C:	< 10 ⁻⁷ hPa (Analogie)
Density at 20 °C:	2.4 g/cm ³ (ISO 787 T10)
Bulk density at 20 °C:	1150-1300 kg/m ³ (DIN 53 466)
Solubility in / Miscibility with water at 20 °C:	> 150 g/l (OECD 105)
Partition coefficient: n-octanol/water:	< -4.7 (literature)
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Thermal decomposition / conditions to be avoided: Processing temperature over: 80 °C

10.3 Possibility of hazardous reactions:

Spontaneously flammable in presence of damp air. Reacts with water : pressure rise and possible bursting of container.

10.4 Conditions to avoid: Protect from humidity and water.

10.5 Incompatible materials:

Store away from water.

Do not store together with oxidising and acidic materials.

10.6 Hazardous decomposition products: Sulphur dioxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

7775-14-6 sodium dithionite

Oral LD₅₀ ~2,500 mg/kg (rat) (OECD 401)

Dermal LD₅₀ >2,000 mg/kg (rat) (OECD 402, read across: NaSO₃)

Inhalative LC₅₀/4h >5.5 mg/l (rat) (OECD 403, read across: NaSO₃)

Harmful if swallowed.

Primary irritant effect:

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation

OECD 405 (rabbit)

Causes serious eye irritation.

Respiratory or skin sensitisation

Mouse Local Lymph Node Assay (LLNA) mouse: Non-sensitizing. (OECD Guideline 429)

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

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STOT-single exposure Based on available data, the classification criteria are not met.**STOT-repeated exposure** Based on available data, the classification criteria are not met.**Aspiration hazard** Based on available data, the classification criteria are not met.**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:****7775-14-6 sodium dithionite**IC₅₀ 206 mg/l (scenedesmus subspicatus) (DIN 38412 Part 9, static)EC₅₀ 98.3 mg/l (daphnia magna) (Directive 79/831/EEC, static)LC₅₀ 62.3 mg/l (leuciscus idus) (DIN 38412 Part 15, static)

NOEC >316 mg/L (brachydanio rerio, 34d) (OECD 210)

12.2 Persistence and degradability

Abiotic degradability:

In contact with water the substance will hydrolyse rapidly.

Information on Stability in Water (Hydrolysis): t_{1/2} 1.5 h (50 °C, pH value 8.5), (Directive 84/449/EEC, C.10)**Degree of elimination:****Classification:** note: inorganic product**12.3 Bioaccumulative potential**

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

12.4 Mobility in soil Adsorption to solid soil phase is not expected.**Additional ecological information:****COD-value:****7775-14-6 sodium dithionite**COD ~210 mg O₂ /g (..) (DIN 38412, part 43)**AOX-indication:**

The product doesn't contain organically bound halogen as per formulation. It will not increase the AOX value when discharged from treatment plant or into neutral waters.

General notes:

The product is oxygen-consuming. The declared action may be partly caused by lack of oxygen.

12.5 Results of PBT and vPvB assessment**PBT:** Does not meet the PBT criteria according to annex XIII of Regulation (EC) No 1907/2006.**vPvB:** Does not meet the vPvB criteria according to annex XIII of Regulation (EC) No 1907/2006.**12.6 Other adverse effects:**

Do not allow to enter soil, waterways or waste water channels. Higher concentrations of the substance may cause a strong chemical oxygen consumption in biological sewage-treatment plants and/or waterways.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

Uncleaned packaging:**Recommendation:**

Disposal must be made according to official regulations.

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Trade name: SODIUM HYDROSULFITE S

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Contaminated multi-path containers must be completely emptied before the return! Risk of auto-ignition.

SECTION 14: Transport information
14.1 UN-Number
ADR, IMDG, IATA

UN1384

14.2 UN proper shipping name
ADR

 1384 SODIUM DITHIONITE (SODIUM
 HYDROSULPHITE)

IMDG, IATA

 SODIUM DITHIONITE (SODIUM
 HYDROSULPHITE)

14.3 Transport hazard class(es)
ADR, IMDG, IATA

**Class
 Label**

 4.2 Substances liable to spontaneous combustion.
 4.2

ADN
ADN/R Class:

4.2

14.4 Packing group
ADR, IMDG, IATA

II

14.5 Environmental hazards:
Marine pollutant:

No

14.6 Special precautions for user

 Warning: Substances liable to spontaneous
 combustion.

Danger code (Kemler):

40

EMS Number:

F-A,S-J

Stowage Category

E

Handling Code

H1 Keep as dry as reasonably practicable

**14.7 Transport in bulk according to Annex II
 of Marpol and the IBC Code**

Not applicable.

Transport/Additional information:
ADR
Limited quantities (LQ)

0

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

Transport category

2

Tunnel restriction code

D/E

IMDG
Limited quantities (LQ)

0

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

UN "Model Regulation":

 UN 1384 SODIUM DITHIONITE (SODIUM
 HYDROSULPHITE), 4.2, II

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**Trade name: SODIUM HYDROSULFITE S**

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SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Ozone layer depleting substances: Not subject to Regulation (EC) No 1005/2009.

Persistent organic pollutants (POPs): Not subject to Regulation (EC) No 850/2004.

Export and import of dangerous chemicals: Not subject to Regulation (EC) No 649/2012.

Detergents Regulation: Not subject to Regulation (EC) No 648/2004

Restrictions (REACH, Title VIII), SVHC: No restrictions according to Title VIII of Regulation (EC) No 1907/2006.

SVHC status: negative

Directive 2012/18/EU**Named dangerous substances - ANNEX I** Substance is not listed.**National regulations:****Waterhazard class:** WGK 1, slightly hazard to waters, UBA registration-no.: 1170**15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H251 Self-heating: may catch fire.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

Recommended restriction of use

Only for industrial use. The fields of application are specified in the "Technical Information" belonging to the product(s). Any further intended application should be discussed with the manufacturer.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Self-heat. 1: Self-heating substances and mixtures – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Sources

IUCLID, International Uniform Chemical Database (European Commission)

GESTIS-substances data base (BIA)

Annex: Exposure Scenarios

Index

1. Manufacture of substance, Industrial applications, (liquid products)

SU3; SU2a, SU2b, SU3, SU4, SU5, SU6b, SU7, SU8, SU9, SU10, SU11, SU12, SU14, SU15, SU16, SU17, SU20, SU23; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC12, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19; PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC19, PC20, PC23, PC24, PC25, PC26, PC28, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40

2. Manufacture of substance, Industrial applications, (granules, low dustiness)

SU3; SU2a, SU2b, SU3, SU4, SU5, SU6b, SU7, SU8, SU9, SU10, SU11, SU12, SU14, SU15, SU16, SU17, SU20, SU23; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC21, PROC22, PROC23, PROC24, PROC25, PROC26; PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC19, PC20, PC23, PC24, PC25, PC26, PC28, PC29, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40

3. Manufacture of substance, Industrial applications, (mid powder, medium dustiness)

SU3; SU2a, SU2b, SU3, SU4, SU5, SU6b, SU7, SU8, SU9, SU10, SU11, SU12, SU14, SU15, SU16, SU17, SU20, SU23; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26; PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC19, PC20, PC23, PC24, PC25, PC26, PC28, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40

4. Manufacture of substance, Industrial applications, (fine powder, high dustiness)

SU3; SU2a, SU2b, SU3, SU4, SU5, SU6b, SU7, SU8, SU9, SU10, SU11, SU12, SU14, SU15, SU16, SU17, SU20, SU23; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26; PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC19, PC20, PC23, PC24, PC25, PC26, PC28, PC29, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40

5. Professional applications, (liquid products)

SU22; SU22; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC12, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC11, PROC20; PC2, PC7, PC9a, PC14, PC15, PC17, PC18, PC20, PC23, PC24, PC25, PC26, PC30, PC31, PC34, PC35, PC37, PC38

6. Professional applications, (granules, low dustiness)

SU22; SU22; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC21, PROC22, PROC23, PROC24, PROC25, PROC26, PROC11; PC2, PC7, PC9a, PC14, PC15, PC17, PC18, PC20, PC23, PC24, PC25, PC26, PC30, PC31, PC34, PC35, PC37, PC38

7. Professional applications, (mid powder, medium dustiness)

Date of print 05.04.2018

SU22; SU22; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26, PROC11; PC2, PC7, PC9a, PC14, PC15, PC17, PC18, PC20, PC23, PC24, PC25, PC26, PC30, PC31, PC34, PC35, PC37, PC38

8. Professional applications, (fine powder, high dustiness)

SU22; SU22; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26, PROC11; PC2, PC7, PC9a, PC14, PC15, PC17, PC18, PC20, PC23, PC24, PC25, PC26, PC30, PC31, PC34, PC35, PC37, PC38

9. Use in textile dyeing, bleaching, impregnation and related auxiliaries, (consumer use)

SU21; SU21; ERC8a, ERC8b; PC34

10. Cleaning agents

SU21; SU21; ERC8a, ERC8b;

1. Short title of exposure scenario

Manufacture of substance, Industrial applications, (liquid products)

SU3; SU2a, SU2b, SU3, SU4, SU5, SU6b, SU7, SU8, SU9, SU10, SU11, SU12, SU14, SU15, SU16, SU17, SU20, SU23; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC12, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19; PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC19, PC20, PC23, PC24, PC25, PC26, PC28, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC1: Use in closed process, no likelihood of exposure. PROC2: Use in closed, continuous process with occasional controlled exposure. PROC12: Use of blow agents in manufacture of foam. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Liquid, very low fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable	

chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.001 mg/m ³
Risk Characterization Ratio (RCR)	< 0.001
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC3: Use in closed batch process (synthesis or formulation). PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers 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, pelettisation. PROC15: Use a laboratory reagent. PROC16: Using material as fuel sources, limited exposure to unburned product to be expected. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Liquid, very low fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure	

only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.01 mg/m ³
Risk Characterization Ratio (RCR)	0.001
Assessment method	Qualitative assessment
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises. PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact). PROC8a: Transfer of substance or preparation (charging/discharging) from/to ves-sels/large containers at non-dedicated facilities PROC10: Roller application or brushing PROC19: Hand-mixing with intimate contact and only PPE available. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Liquid, very low fugacity
Duration and Frequency of activity	480 min 5 days per week
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic

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Exposure estimate	0.05 mg/m ³
Risk Characterization Ratio (RCR)	0.005
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC17: Lubrication at high energy conditions and in partly open process. PROC18: Greasing at high energy conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	liquid
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.1 mg/m ³
Risk Characterization Ratio (RCR)	0.01
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC7: Industrial spraying Use domain: industrial

Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Liquid, moderate fugacity
Duration and Frequency of activity	480 min 5 days per week
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Provide extract ventilation to points where emissions occur (LEV).	Effectiveness: 78 %
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	4.4 mg/m ³
Risk Characterization Ratio (RCR)	0.44
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

2. Short title of exposure scenario

Manufacture of substance, Industrial applications, (granules, low dustiness)
 SU3; SU2a, SU2b, SU3, SU4, SU5, SU6b, SU7, SU8, SU9, SU10, SU11, SU12, SU14, SU15, SU16,
 SU17, SU20, SU23; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC1, PROC2, PROC3, PROC4,
 PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15,
 PROC16, PROC17, PROC18, PROC19, PROC21, PROC22, PROC23, PROC24, PROC25, PROC26;
 PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC19, PC20, PC23,
 PC24, PC25, PC26, PC28, PC29, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC1: Use in closed process, no likelihood of exposure. PROC2: Use in closed, continuous process with occasional controlled exposure.
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, low dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.01 mg/m ³
Risk Characterization Ratio (RCR)	0.001
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC3: Use in closed batch process (synthesis or formulation). PROC6: Calendering operations PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers 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, pelettisation. PROC15: Use a laboratory reagent.

	PROC16: Using material as fuel sources, limited exposure to unburned product to be expected. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, low dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.1 mg/m ³
Risk Characterization Ratio (RCR)	0.01
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises. PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact). PROC8a: Transfer of substance or preparation (charging/discharging) from/to ves-sels/large containers at non-dedicated facilities PROC10: Roller application or brushing PROC19: Hand-mixing with intimate contact and only PPE available. PROC21: Low energy manipulation of substances bound in materials and/or articles Use domain: industrial
Operational conditions	

Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, low dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Consumer - inhalation, long-term - systemic
Exposure estimate	0.5 mg/m ³
Risk Characterization Ratio (RCR)	0.05
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC7: Industrial spraying PROC17: Lubrication at high energy conditions and in partly open process. PROC18: Greasing at high energy conditions. PROC26: Handling of solid inorganic substances at ambient temperature. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, low dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	

Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
PROC7, PROC17, PROC18	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	1 mg/m ³
Risk Characterization Ratio (RCR)	0.1
PROC26	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	1.5 mg/m ³
Risk Characterization Ratio (RCR)	0.15
PROC7, PROC17, PROC18, PROC26	
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC23: Open processing and transfer operations (with minerals) at elevated temperature PROC25: Other hot work operations with metals Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be	

applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Consumer - inhalation, long-term - systemic
Exposure estimate	2 mg/m ³
Risk Characterization Ratio (RCR)	0.2
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC22: Potentially closed processing operations (with minerals) at elevated temperature Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	7 mg/m ³
Risk Characterization Ratio (RCR)	0.7
Assessment method	Qualitative assessment

Worker - contact with eyes
Guidance to Downstream Users
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php

Contributing exposure scenario	
Use descriptors covered	PROC24: High (mechanical) energy work-up of substances bound in materials and/or articles Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5.5 mg/m ³
Risk Characterization Ratio (RCR)	0.55
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

* * * * *

3. Short title of exposure scenario

Manufacture of substance, Industrial applications, (mid powder, medium dustiness)

SU3; SU2a, SU2b, SU3, SU4, SU5, SU6b, SU7, SU8, SU9, SU10, SU11, SU12, SU14, SU15, SU16, SU17, SU20, SU23; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26; PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC19, PC20, PC23, PC24, PC25, PC26, PC28, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC1: Use in closed process, no likelihood of exposure. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, medium dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.01 mg/m ³
Risk Characterization Ratio (RCR)	0.001
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	
Contributing exposure scenario	
Use descriptors covered	PROC2: Use in closed, continuous process with occasional controlled exposure. PROC15: Use a laboratory reagent.

	Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, medium dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.5 mg/m ³
Risk Characterization Ratio (RCR)	0.05
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC7: Industrial spraying PROC17: Lubrication at high energy conditions and in partly open process. PROC18: Greasing at high energy conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, medium dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area	

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every day. Avoid frequent and direct contact with substance.	
Provide extract ventilation to points where emissions occur (LEV).	Effectiveness: 78.0 %
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	4.4 mg/m ³
Risk Characterization Ratio (RCR)	0.44
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC3: Use in closed batch process (synthesis or formulation). PROC13: Treatment of articles by dipping and pouring. PROC14: Production of preparations or articles by tableting, compression, extrusion, pelettisation. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, medium dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	

Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	1 mg/m ³
Risk Characterization Ratio (RCR)	0.1
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises. PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact). PROC6: Calendring operations PROC8a: Transfer of substance or preparation (charging/discharging) from/to ves-sels/large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). PROC10: Roller application or brushing PROC16: Using material as fuel sources, limited exposure to unburned product to be expected. PROC19: Hand-mixing with intimate contact and only PPE available. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, medium dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	

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Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC22: Potentially closed processing operations (with minerals) at elevated temperature Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	7 mg/m ³
Risk Characterization Ratio (RCR)	0.7
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC23: Open processing and transfer operations (with minerals) at elevated temperature PROC25: Other hot work operations with metals Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	2 mg/m ³
Risk Characterization Ratio (RCR)	0.2
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC24: High (mechanical) energy work-up of substances bound in materials and/or articles Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week

Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5.5 mg/m ³
Risk Characterization Ratio (RCR)	0.55
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC26: Handling of solid inorganic substances at ambient temperature. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, medium dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	

Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	4 mg/m ³
Risk Characterization Ratio (RCR)	0.4
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

4. Short title of exposure scenario

Manufacture of substance, Industrial applications, (fine powder, high dustiness)

SU3; SU2a, SU2b, SU3, SU4, SU5, SU6b, SU7, SU8, SU9, SU10, SU11, SU12, SU14, SU15, SU16, SU17, SU20, SU23; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26; PC1, PC2, PC3, PC4, PC7, PC8, PC9a, PC9b, PC13, PC14, PC15, PC17, PC18, PC19, PC20, PC23, PC24, PC25, PC26, PC28, PC29, PC30, PC31, PC32, PC34, PC35, PC37, PC38, PC39, PC40

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC1: Use in closed process, no likelihood of exposure. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per year
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear	

suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.01 mg/m ³
Risk Characterization Ratio (RCR)	0.001
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC2: Use in closed, continuous process with occasional controlled exposure. PROC3: Use in closed batch process (synthesis or formulation). Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	1 mg/m ³

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Risk Characterization Ratio (RCR)	0.1
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises. PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact). PROC6: Calendring operations PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Local exhaust ventilation	Effectiveness: 78 %
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5.5 mg/m ³
Risk Characterization Ratio (RCR)	0.55
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	
Contributing exposure scenario	

Use descriptors covered	PROC8a: Transfer of substance or preparation (charging/discharging) from/to ves-sels/large containers at non-dedicated facilities PROC17: Lubrication at high energy conditions and in partly open process. PROC18: Greasing at high energy conditions. Use domain: industrial
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Operational conditions

Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor

Risk Management Measures

Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Provide extract ventilation to points where emissions occur (LEV).	Effectiveness: 78 %
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP1 conforming to DIN EN 149	Effectiveness: 75 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	

Exposure estimate and reference to its source

Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	2.75 mg/m ³
Risk Characterization Ratio (RCR)	0.275
Assessment method	Qualitative assessment
	Worker - contact with eyes

Guidance to Downstream Users

 For scaling see: <http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php>
Contributing exposure scenario

Use descriptors covered	PROC7: Industrial spraying Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$

Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Provide extract ventilation to points where emissions occur (LEV).	Effectiveness: 78 %
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP1 conforming to DIN EN 149	Effectiveness: 75 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5.5 mg/m ³
Risk Characterization Ratio (RCR)	0.55
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC10: Roller application or brushing PROC14: Production of preparations or articles by tableting, compression, extrusion, pelettisation. PROC16: Using material as fuel sources, limited exposure to unburned product to be expected. PROC26: Handling of solid inorganic substances at ambient temperature. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor

Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Local exhaust ventilation	Effectiveness: 78 %
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	2.2 mg/m ³
Risk Characterization Ratio (RCR)	0.22
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Provide extract ventilation to points where emissions occur (LEV).	Effectiveness: 78 %
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk	

characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	4.4 mg/m ³
Risk Characterization Ratio (RCR)	0.44
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC19: Hand-mixing with intimate contact and only PPE available. Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP1 conforming to DIN EN 149	Effectiveness: 75 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	6.25 mg/m ³
Risk Characterization Ratio (RCR)	0.625
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC13: Treatment of articles by dipping and pouring. PROC15: Use a laboratory reagent. PROC24: High (mechanical) energy work-up of substances bound in materials and/or articles Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
PROC13, PROC15	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
PROC24	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5.5 mg/m ³
Risk Characterization Ratio (RCR)	0.55
PROC13, PROC15, PROC24	
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	
Contributing exposure scenario	
Use descriptors covered	PROC22: Potentially closed processing operations (with

	minerals) at elevated temperature Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	7 mg/m ³
Risk Characterization Ratio (RCR)	0.7
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC23: Open processing and transfer operations (with minerals) at elevated temperature PROC25: Other hot work operations with metals Use domain: industrial
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	

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Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	2 mg/m ³
Risk Characterization Ratio (RCR)	0.2
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

* * * * *

5. Short title of exposure scenario

Professional applications, (liquid products)

SU22; SU22; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC12, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC11, PROC20; PC2, PC7, PC9a, PC14, PC15, PC17, PC18, PC20, PC23, PC24, PC25, PC26, PC30, PC31, PC34, PC35, PC37, PC38

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC2: Use in closed, continuous process with occasional controlled exposure. PROC12: Use of blow agents in manufacture of foam. PROC20: Heat and pressure transfer fluids in dispersive use but closed systems Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite

	Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Liquid, very low fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.001 mg/m ³
Risk Characterization Ratio (RCR)	< 0.001
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC3: Use in closed batch process (synthesis or formulation). PROC15: Use a laboratory reagent. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Liquid, very low fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	

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Personal measures have to be applied in case of potential exposure only.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.01 mg/m ³
Risk Characterization Ratio (RCR)	0.001
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC8a: Transfer of substance or preparation (charging/discharging) from/to ves-sels/large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers 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: Hand-mixing with intimate contact and only PPE available. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Liquid, very low fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE

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	Worker - inhalation, long-term - systemic
Exposure estimate	0.05 mg/m ³
Risk Characterization Ratio (RCR)	0.005
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC11: Non industrial spraying Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Liquid, very low fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP1 conforming to DIN EN 149	Effectiveness: 75 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC16: Using material as fuel sources, limited exposure to unburned product to be expected. PROC18: Greasing at high energy conditions. Use domain: professional

Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Liquid, very low fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.5 mg/m ³
Risk Characterization Ratio (RCR)	0.05
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC17: Lubrication at high energy conditions and in partly open process. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Liquid, very low fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	

Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	1 mg/m ³
Risk Characterization Ratio (RCR)	0.1
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises. PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact). PROC14: Production of preparations or articles by tableting, compression, extrusion, pelettisation. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Liquid, very low fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk	

characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.1 mg/m ³
Risk Characterization Ratio (RCR)	0.01
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

6. Short title of exposure scenario

Professional applications, (granules, low dustiness)

SU22; SU22; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC21, PROC22, PROC23, PROC24, PROC25, PROC26, PROC11; PC2, PC7, PC9a, PC14, PC15, PC17, PC18, PC20, PC23, PC24, PC25, PC26, PC30, PC31, PC34, PC35, PC37, PC38

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC2: Use in closed, continuous process with occasional controlled exposure. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, low dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure	

only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.01 mg/m ³
Risk Characterization Ratio (RCR)	0.001
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC3: Use in closed batch process (synthesis or formulation). PROC15: Use a laboratory reagent. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, low dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.1 mg/m ³
Risk Characterization Ratio (RCR)	0.01
Assessment method	Qualitative assessment
	Worker - contact with eyes

Guidance to Downstream Users
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php

Contributing exposure scenario	
Use descriptors covered	PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises. PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact). PROC6: Calendring operations PROC11: Non industrial spraying PROC14: Production of preparations or articles by tableting, compression, extrusion, pelettisation. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, low dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	1 mg/m ³
Risk Characterization Ratio (RCR)	0.1
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC8a: Transfer of substance or preparation (charging/discharging) from/to ves-sels/large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large

	containers 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: Hand-mixing with intimate contact and only PPE available. PROC21: Low energy manipulation of substances bound in materials and/or articles Use domain: professional
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Operational conditions

Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, low dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor

Risk Management Measures

Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	

Exposure estimate and reference to its source

Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.5 mg/m ³
Risk Characterization Ratio (RCR)	0.05
Assessment method	Qualitative assessment
	Worker - contact with eyes

Guidance to Downstream Users

For scaling see: <http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php>

Contributing exposure scenario

Use descriptors covered	PROC16: Using material as fuel sources, limited exposure to unburned product to be expected. PROC18: Greasing at high energy conditions. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$

Physical state	Solid, low dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC17: Lubrication at high energy conditions and in partly open process. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, low dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be	

applied in case of potential exposure only.	
Wear a respirator mask FFP1 conforming to DIN EN 149	Effectiveness: 75 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	2.5 mg/m ³
Risk Characterization Ratio (RCR)	0.25
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC22: Potentially closed processing operations (with minerals) at elevated temperature Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP1 conforming to DIN EN 149	Effectiveness: 75 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic

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Exposure estimate	2.5 mg/m ³
Risk Characterization Ratio (RCR)	0.25
Assessment method	Qualitative assessment
	Consumer - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC23: Open processing and transfer operations (with minerals) at elevated temperature Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
Assessment method	Qualitative assessment
	Consumer - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC24: High (mechanical) energy work-up of substances bound in materials and/or articles Use domain: professional

Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5.5 mg/m ³
Risk Characterization Ratio (RCR)	0.55
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC25: Other hot work operations with metals Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable	

chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	4 mg/m ³
Risk Characterization Ratio (RCR)	0.4
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC26: Handling of solid inorganic substances at ambient temperature. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, low dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	3 mg/m ³

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Risk Characterization Ratio (RCR)	0.3
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

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7. Short title of exposure scenario

Professional applications, (mid powder, medium dustiness)

SU22; SU22; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26, PROC11; PC2, PC7, PC9a, PC14, PC15, PC17, PC18, PC20, PC23, PC24, PC25, PC26, PC30, PC31, PC34, PC35, PC37, PC38

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC2: Use in closed, continuous process with occasional controlled exposure. PROC3: Use in closed batch process (synthesis or formulation). Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, medium dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk	

characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	1 mg/m ³
Risk Characterization Ratio (RCR)	0.1
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	<p>PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises. PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact). PROC6: Calendring operations PROC8a: Transfer of substance or preparation (charging/discharging) from/to ves-sels/large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers 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. PROC14: Production of preparations or articles by tableting, compression, extrusion, pelettisation. PROC19: Hand-mixing with intimate contact and only PPE available. Use domain: professional</p>
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, medium dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are	

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based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, medium dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	0.5 mg/m ³
Risk Characterization Ratio (RCR)	0.05
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario

Use descriptors covered	PROC11: Non industrial spraying PROC16: Using material as fuel sources, limited exposure to unburned product to be expected. Use domain: professional
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Operational conditions

Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, medium dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor

Risk Management Measures

Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP1 conforming to DIN EN 149	Effectiveness: 75 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	

Exposure estimate and reference to its source

Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
Assessment method	Qualitative assessment
	Worker - contact with eyes

Guidance to Downstream Users

 For scaling see: <http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php>
Contributing exposure scenario

Use descriptors covered	PROC17: Lubrication at high energy conditions and in partly open process. PROC18: Greasing at high energy conditions. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, medium dustiness

Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP2 conforming to DIN EN 149	Effectiveness: 90 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC24: High (mechanical) energy work-up of substances bound in materials and/or articles Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be	

applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5.5 mg/m ³
Risk Characterization Ratio (RCR)	0.55
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC25: Other hot work operations with metals Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	4 mg/m ³
Risk Characterization Ratio (RCR)	0.4
Assessment method	Qualitative assessment
	Worker - contact with eyes

Guidance to Downstream Users

 For scaling see: <http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php>

Contributing exposure scenario	
Use descriptors covered	PROC22: Potentially closed processing operations (with minerals) at elevated temperature Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP1 conforming to DIN EN 149	Effectiveness: 75 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	2.5 mg/m ³
Risk Characterization Ratio (RCR)	0.25
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	
Contributing exposure scenario	
Use descriptors covered	PROC23: Open processing and transfer operations (with minerals) at elevated temperature Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite

	Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC26: Handling of solid inorganic substances at ambient temperature. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, medium dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	

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Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	8 mg/m ³
Risk Characterization Ratio (RCR)	0.8
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

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8. Short title of exposure scenario

Professional applications, (fine powder, high dustiness)

SU22; SU22; ERC1, ERC6a, ERC6b, ERC8a, ERC8b; PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC22, PROC23, PROC24, PROC25, PROC26, PROC11; PC2, PC7, PC9a, PC14, PC15, PC17, PC18, PC20, PC23, PC24, PC25, PC26, PC30, PC31, PC34, PC35, PC37, PC38

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC2: Use in closed, continuous process with occasional controlled exposure. PROC3: Use in closed batch process (synthesis or formulation). PROC13: Treatment of articles by dipping and pouring. PROC15: Use a laboratory reagent. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor

Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises. PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact). PROC6: Calendaring operations PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC14: Production of preparations or articles by tableting, compression, extrusion, pelettisation. PROC16: Using material as fuel sources, limited exposure to unburned product to be expected. PROC19: Hand-mixing with intimate contact and only PPE available. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	

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Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP2 conforming to DIN EN 149	Effectiveness: 90 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC11: Non industrial spraying PROC17: Lubrication at high energy conditions and in partly open process. PROC18: Greasing at high energy conditions. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	< 60 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP2	Effectiveness: 90 %

conforming to DIN EN 149	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	4 mg/m ³
Risk Characterization Ratio (RCR)	0.4
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). PROC26: Handling of solid inorganic substances at ambient temperature. Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP1 conforming to DIN EN 149	Effectiveness: 75 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³

Risk Characterization Ratio (RCR)	0.5
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC10: Roller application or brushing Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP1 conforming to DIN EN 149	Effectiveness: 75 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	2.5 mg/m ³
Risk Characterization Ratio (RCR)	0.25
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC22: Potentially closed processing operations (with minerals) at elevated temperature Use domain: professional

Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Wear a respirator mask FFP1 conforming to DIN EN 149	Effectiveness: 75 %
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	2.5 mg/m ³
Risk Characterization Ratio (RCR)	0.25
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC23: Open processing and transfer operations (with minerals) at elevated temperature Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: $\geq 0\%$ - $\leq 100\%$
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area	

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every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5 mg/m ³
Risk Characterization Ratio (RCR)	0.5
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC24: High (mechanical) energy work-up of substances bound in materials and/or articles Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, high dustiness
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	

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Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	5.5 mg/m ³
Risk Characterization Ratio (RCR)	0.55
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	PROC25: Other hot work operations with metals Use domain: professional
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 0 % - <= 100 %
Physical state	Solid, Melted mass, Liquid, high fugacity
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
Risk Management Measures	
Clean equipment and the work area every day. Avoid frequent and direct contact with substance.	
Wear suitable face shield Use suitable chemically resistant gloves. Wear suitable working clothes.	
Personal measures have to be applied in case of potential exposure only.	
Use suitable eye protection.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	MEASE
	Worker - inhalation, long-term - systemic
Exposure estimate	4 mg/m ³
Risk Characterization Ratio (RCR)	0.4
Assessment method	Qualitative assessment
	Worker - contact with eyes
Guidance to Downstream Users	
For scaling see: http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php	

Contributing exposure scenario	
Use descriptors covered	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

9. Short title of exposure scenario

Use in textile dyeing, bleaching, impregnation and related auxiliaries, (consumer use)
 SU21; SU21; ERC8a, ERC8b; PC34

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PC34: Textile dyes, finishing and impregnating products: including bleaches and other processing aids, Detergent powders exposure of adults
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 20 % - <= 60 %
Physical state	Solid, low dustiness
Duration and Frequency of activity	Exposure duration: < 1 min 365 days per year Relevant for inhalative exposure estimates
Indoor/Outdoor	Indoor
Room size	1 m ³
	Amount per use 0.07 kg Relevant for inhalative exposure estimates
Risk Management Measures	
Application Area	Consumer use
Consumer Measures	In case of contact with eyes, rinse immediately with plenty of water
	Risk Management Measures are based on qualitative risk characterisation.
Exposure estimate and reference to its source	
Assessment method	Other consideration (non-standard tool)
	Consumer - inhalation, long-term - systemic
Exposure estimate	0.0002 mg/m ³
Risk Characterization Ratio (RCR)	0.00002
	Relevant for machine wash

Contributing exposure scenario	
Use descriptors covered	PC34: Textile dyes, finishing and impregnating products: including bleaches and other processing aids, Hand wash exposure of adults
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 20 % - <= 60 %
Physical state	Solid, low dustiness

Duration and Frequency of activity	Exposure duration: 5 - 10 min 365 days per year Relevant for inhalative exposure estimates
Indoor/Outdoor	Indoor
Room size	1 m ³
	Amount per use 0.05 kg Relevant for hand wash
Risk Management Measures	
Application Area	Consumer use
Consumer Measures	In case of contact with eyes, rinse immediately with plenty of water
	Risk Management Measures are based on qualitative risk characterisation.
Exposure estimate and reference to its source	
Assessment method	Other consideration (non-standard tool)
	Consumer - inhalation, long-term - systemic
Exposure estimate	0.0002 mg/m ³
Risk Characterization Ratio (RCR)	0.00002
	Relevant for hand wash

Contributing exposure scenario	
Use descriptors covered	PC34: Textile dyes, finishing and impregnating products: including bleaches and other processing aids exposure of children
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 20 % - <= 60 %
Physical state	Solid, low dustiness
Indoor/Outdoor	Indoor
Room size	1 m ³
	Amount ingested 0.008 g Relevant for oral exposure estimates
Risk Management Measures	
Application Area	Consumer use
Route of exposure	Oral
Consumer Measures	Keep away from children
Exposure estimate and reference to its source	
Assessment method	Other consideration (non-standard tool)
	Consumer - oral, short-term - systemic
Exposure estimate	0.480 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.606
	Contact is only accidental.

Contributing exposure scenario	
Use descriptors covered	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

10. Short title of exposure scenario

Cleaning agents
SU21; SU21; ERC8a, ERC8b;

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PC0: Other Products:, ink eraser exposure of children
Operational conditions	
Concentration of the substance	sodium dithionite; sodium hydrosulphite Content: >= 20 % - <= 50 %
Physical state	liquid
Duration and Frequency of activity	< 15 min 1 uses per day
Indoor/Outdoor	Indoor
Exposure estimate and reference to its source	
Assessment method	Other consideration (non-standard tool)
	Consumer- oral, long-term - local und systemic
Exposure estimate	0.025 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.000032
Contributing exposure scenario	
Use descriptors covered	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
