



**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date: 26.01.2017

Version number 1

Revision: 26.01.2017

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier****Trade name: Sulphur slurry / Sulphur cake****1.2. Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

**Sector of Use**

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

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

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

**Application of the substance / the mixture:**

Intermediate

Formulation of preparations

Manufacture of rubber products

Construction chemicals

Fireworks

Agriculture

**Uses advised against:** Other uses than the identified uses indicated above.**1.3. Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

ESD-SiC b.v.

Kloosterlaan 11-13

9936 TE FARMSUM, The Netherlands

Telefon: +31 596 637 222

Telefax: +31 596 610 738

E-Mail: info@esd-sic.nl

Website: www.esd-sic.nl

**Further information obtainable from:** E-Mail (competent person): SDS@bipro.de**1.4. Emergency telephone number**

GIZ-Nord, Göttingen, Germany (Member of EPECS Network)

+49 (0)551 19240

(Contd. on page 2)



**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

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**Trade name: Sulphur slurry / Sulphur cake****SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008:**

GHS07

Skin Irrit. 2 H315 Causes skin irritation.

**2.2. Label elements****Labelling according to Regulation (EC) No 1272/2008:**

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

**Hazard pictograms:**

GHS07

**Signal word:** Warning**Hazard statements:**

H315 Causes skin irritation.

**Precautionary statements:**

P280 Wear protective gloves.  
P264 Wash thoroughly after handling.  
P321 Specific treatment (see on this label).  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P362+P364 Take off contaminated clothing and wash it before reuse.

**2.3. Other hazards**

Toxic gases (hydrogen sulphide, H<sub>2</sub>S) and irritating gases (sulphur dioxide, SO<sub>2</sub>) can be formed in the vapor chamber of closed systems. When opening, take precautionary measures regarding the possible release of gases and vapors.

**Results of PBT and vPvB assessment:**

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.

(Contd. on page 3)



**Safety Data Sheet**  
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**Dangerous components:**

CAS: 7704-34-9 EINECS: 231-722-6 Reg.no.:01-2119487295-27-0080	sulfur	Skin Irrit. 2, H315	75-85%
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**Nonhazardous components:**

CAS: 7732-18-5 EINECS: 231-791-2	water		15-25%
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**Additional information:** For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures**

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.  
Take off contaminated clothing and wash before reuse.  
Seek medical treatment.

**After eye contact:**

Rinse opened eye for several minutes under running water.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
Seek medical treatment.

**After swallowing:** Do not induce vomiting; call for medical help immediately.

**4.2. Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

First Aid, decontamination, treatment of symptoms.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing agents:**

Water spray  
Fire-extinguishing powder  
Carbon dioxide (CO<sub>2</sub>)  
Foam

**For safety reasons unsuitable extinguishing agents:** Water with full jet

**5.2. Special hazards arising from the substance or mixture**

Hydrogen sulphide  
Sulphur oxide (SO<sub>x</sub>)

(Contd. on page 4)



**Safety Data Sheet**  
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**Trade name: Sulphur slurry / Sulphur cake****5.3. Advice for firefighters****Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

**Additional information:** Move undamaged containers from immediate hazard area if it can be done safely.**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Avoid any contact with eyes or skin.

**6.2. Environmental precautions**

Do not allow product to reach sewage system or any water course.

Dumping into the environment must be prevented.

**6.3. Methods and material for containment and cleaning up**

Avoid dust formation.

Remove mechanically, placing in appropriate containers for disposal.

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**

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with eyes or skin. Wear personal protective equipment.

Do not breathe dust/fume/gas/mist/vapours/spray.

Open and handle receptacle with care.

Prevent formation of dust.

**Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.**7.2. Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** Store only in the original container.**Information about storage in one common storage facility:**

See section 10.5.

(Contd. on page 5)



**Safety Data Sheet**  
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Version number 1

Revision: 26.01.2017

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Keep away from food, drink and animal feeding stuffs.

**Further information about storage conditions:**

Keep container tightly sealed.

Protect from heat and direct sunlight.

Ensure that local, federal and national legislation on storage conditions are observed.

Toxic gases (hydrogen sulphide, H<sub>2</sub>S) and irritating gases (sulphur dioxide, SO<sub>2</sub>) can be formed in the vapor chamber of closed systems. When opening, take precautionary measures regarding the possible release of gases and vapors. Follow the instructions.

**Storage class:** 10-13 Other combustible and incombustible substances (TRGS 510 DE)

**7.3. Specific end use(s)** See section 1.

**SECTION 8: Exposure controls/personal protection****Additional information about design of technical facilities:**

Technical measures and the application of adequate working methods take priority over the use of personal protection equipment.

**8.1. Control parameters****Ingredients with limit values that require monitoring at the workplace:****CAS: 7783-06-4 hydrogen sulphide**

WEL (Great Britain)	Short-term value: 14 mg/m <sup>3</sup> , 10 ppm Long-term value: 7 mg/m <sup>3</sup> , 5 ppm
IOELV (EU)	Short-term value: 14 mg/m <sup>3</sup> , 10 ppm Long-term value: 7 mg/m <sup>3</sup> , 5 ppm

**Additional information:**

The lists valid during the making were used as basis.

Hydrogen sulphide can be released. A inhalation risk assessment should be carried out in order to determine control mechanisms in accordance with local conditions (E500).

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

Do not eat, drink, smoke or sniff while working.

Ensure that washing facilities are available at the work place.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Wash contaminated clothing prior to re-use.

**Respiratory protection:**

If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn.

(Contd. on page 6)



**Safety Data Sheet**  
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Version number 1

Revision: 26.01.2017

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The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, a self-contained breathing apparatus must be used!

**Protection of hands:**

Tested protective gloves are to be worn. When handling chemical substances, chemical protective gloves must be worn with CE label including a four digit code. Type of chemical protective gloves to choose depends on the concentration and quantity of dangerous substances as well as on work place specifications. In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

**Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Recommendation:

Butyl rubber, BR

Nitrile rubber, NBR

PVC gloves

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Tightly sealed goggles

**Body protection:** Protective work clothing

**Limitation and supervision of exposure into the environment:** Dumping into the environment must be prevented.

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

<b>Form:</b>	Viscous Solid mass
<b>Colour:</b>	Yellow Grey Beige
<b>Odour:</b>	Light Like rotten eggs (mercaptans)
<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not determined.

**Change in condition**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	> 100 °C

**Flash point:** No data available.

(Contd. on page 7)



**Safety Data Sheet**  
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<b>Flammability (solid, gas):</b>	No data available.
<b>Ignition temperature:</b>	Not determined.
<b>Decomposition temperature:</b>	Not determined.
<b>Auto-ignition temperature:</b>	Product is not selfigniting.
<b>Explosive properties:</b>	Product does not present an explosion hazard.
<b>Density:</b>	Not determined.
<b>Vapour density:</b>	Not determined.
<b>Solubility in / Miscibility with water:</b>	Insoluble.
<b>Partition coefficient: n-octanol/water:</b>	Not determined.
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>Solvent content:</b>	
<b>VOC (EC)</b>	0.00 %
<b>9.2. Other information</b>	Bulk density: 0.6 - 0.8

**SECTION 10: Stability and reactivity**

**10.1. Reactivity** The product is stable under standard conditions (temperature, pressure) of storage and handling.

**10.2. Chemical stability** The product is stable under standard conditions (temperature, pressure) of storage and handling.

**10.3. Possibility of hazardous reactions** No dangerous reactions known.

**10.4. Conditions to avoid** Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

**10.5. Incompatible materials**

Acids

Oxidizing agents

**10.6. Hazardous decomposition products**

Hydrogen sulphide

Sulphur oxides (SO<sub>x</sub>)

(Contd. on page 8)



**Safety Data Sheet**  
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**Trade name: Sulphur slurry / Sulphur cake****SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity:** Based on available data, the classification criteria are not met.**LD/LC50 values:****CAS: 7704-34-9 sulfur**

Oral	LD50	> 2000 mg/kg bw (rat)
Dermal	LD50	> 2000 mg/kg bw (rat)
Inhalative	LC50	> 5.43 g/m <sup>3</sup> (rat) (4h)

**Primary irritant effect:****Skin corrosion/irritation:**

Causes skin irritation.

**Serious eye damage/irritation:** Based on available data, the classification criteria are not met.**Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.**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.**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:****CAS: 7704-34-9 sulfur**

NOEC	> 5 µg/l (algae) (72 h)
	> 100 mg/l (Daphnia magna) (21 d)
EC50	> 5 µg/l (Daphnia magna) (48h)
LC0	> 5 µg/l (Oncorhynchus mykiss) (96 h)

**12.2. Persistence and degradability** No further relevant information available.**12.3. Bioaccumulative potential** No further relevant information available.**12.4. Mobility in soil** No further relevant information available.

(Contd. on page 9)





**Safety Data Sheet**  
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**General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Avoid transfer into the environment.

**12.5. Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**12.6. Other adverse effects** No further relevant information available.

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

Waste disposal according to official state regulations.  
Dumping into the environment must be prevented.

**Uncleaned packaging:****Recommendation:**

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.  
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

**SECTION 14: Transport information**

This type of sulphur is not subject to ADR regulation, because of the composition and form (see ADR paragraph 3.3.1 special provisions 242).

**14.1. UN-Number**

**ADR, ADN, IMDG, IATA** Void.

**14.2. UN proper shipping name**

**ADR, ADN, IMDG, IATA** Void.

**14.3. Transport hazard class(es)**

**ADR, ADN, IMDG, IATA**  
**Class** Void.

**14.4. Packing group**

**ADR, IMDG, IATA** Void.

**14.5. Environmental hazards** Not applicable.

**14.6. Special precautions for user** Not applicable.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

**UN "Model Regulation":** Void.

(Contd. on page 10)



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**Trade name: Sulphur slurry / Sulphur cake****SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU-Regulations

Regulation (EC) No 1907/2006 (REACH)

Regulation (EC) No 1272/2008 (CLP)

Regulation 98/24/EC (employee health protection)

**Directive 2012/18/EU****Named dangerous substances - ANNEX I:** None of the ingredients is listed.**REGULATION (EC) No 1907/2006 ANNEX XVII:** Conditions of restriction: 3**National regulations:** National legislation has to be observed!**Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

Employment restrictions concerning women of child-bearing age must be observed.

**Other regulations, limitations and prohibitive regulations:** National legislation has to be observed!**15.2. Chemical safety assessment** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

**Relevant phrases:**

H315 Causes skin irritation.

**Training hints:**

The product should only be handled by persons, who were informed sufficiently about the nature of the product and about the necessary safety precautions.

**Abbreviations and acronyms:**

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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

(Contd. on page 11)



ESD-SIC bv

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PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Skin Irrit. 2: Skin corrosion/irritation – Category 2

**Sources:** Data arise from reference works and literature.

GB