

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product identifier:

Product name: SODIUM SULPHIDE HYDRATE
REACH registered number(s): 01-2119513694-38-XXXX
CAS number: 27610-45-3
EINECS number: * 215-211-5
Synonyms: DISODIUM SULPHIDE HYDRATE SULPHIDE OF SODIUM HYDRATE

Relevant identified uses of the substance or mixture and uses advised against:

Use of substance / mixture: Pulp & paper applications.
Paper industry.
Dye.
Leather Tanning.

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Classification under CHIP: Xn: R22; T: R24; -: R31; C: R34; N: R50

Classification under CLP: Acute Tox. 3: H311; Acute Tox. 4: H302; Aquatic Acute 1: H400; Skin Corr. 1B: H314.

Most important adverse effects: Harmful if swallowed.

Toxic in contact with skin.
Contact with acids liberates toxic gas.
Causes burns.
Very toxic to aquatic organisms.

Label elements:

Label elements under CLP:

Hazard statements: * H302: Harmful if swallowed.
H311: Toxic in contact with skin.
H314: Causes severe skin burns and eye damage.
H400: Very toxic to aquatic life.

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Signal words:

* Danger.

Hazard pictograms:

* GHS05: Corrosion.

GHS06: Skull and crossbones.

GHS09: Environmental.



Precautionary statements:

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

P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P330: Rinse mouth.

P501: Dispose of contents/container to : An approved recycle or waste disposal facility.

Other hazards PBT:

This substance is not identified as a PBT substance.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures:

Hazardous ingredients:

SODIUM SULPHIDE

EINECS

CAS

CHIP Classification

CLP Classification

Percent

215-211-5

1313-82-2

T: R24; Xn: R22; C: R34; -: R31; N: R50

Acute Tox. 3: H311;

50-70%

Acute Tox. 4: H302;

Skin Corr. 1B: H314;

Aquatic Acute 1: H400;

EUH031

Non-hazardous ingredients:

WATER

EINECS

CAS

CHIP Classification

CLP Classification

Percent

-

7732-18-5

-

-

30-50%

4. FIRST AID MEASURES

Description of first aid measures:

Skin contact:

Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

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Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: * Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If unconscious and breathing is OK, place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. If symptoms develop seek medical attention.

Most important symptoms and effects, both acute and delayed:

Skin contact: * Irritation or pain may occur at the site of contact. Severe burns may occur. Blistering may occur. Absorption through the skin may be fatal.

Eye contact: There may be severe pain. Corneal burns may occur. Risk of serious damage to eyes.

Ingestion: May cause throat burns. Causes burns to the gastrointestinal tract. Nausea and stomach pain may occur. There may be vomiting and diarrhoea. Severe poisoning can cause shock, unconsciousness and convulsions.

Inhalation: There may be shortness of breath with a burning sensation in the throat. There may be congestion of the lungs causing severe shortness of breath. May cause irritation of the mucous membranes and respiratory system. Prolonged or repeated exposure may cause ulceration and perforation of the nasal septum.

Delayed / immediate effects: * Immediate effects can be expected after short-term exposure. Symptoms of poisoning may only appear several days later.

Indication of any immediate medical attention and special treatment needed:

Immediate / special treatment: * A decontamination shower should be available on the premises.
Eye bathing equipment should be available on the premises.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

Special hazards arising from the substance or mixture:

Exposure hazards: Keep containers exposed to fire cool with water spray. In combustion emits toxic fumes of sulphur oxides. Toxic. If heated sulphydric acid may be liberated. Flammable.

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal precautions: Wear suitable protective clothing. Refer to section 8 of SDS for personal protection details.
Remove all incompatible materials as outlined in section 10 of SDS. Do not create dust.

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Environmental precautions: Do not discharge into drains or rivers.

Methods and material for containment and cleaning up:

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method.
Product may be dampened with a little water to reduce dust formation. Wash the spillage site with large amounts of water.

Reference to other sections: * Refer to section 8 of SDS. Refer to section 13 of SDS.

7. HANDLING AND STORAGE

Precautions for safe handling:

Handling requirements: * Ensure there is sufficient ventilation of the area. Wear suitable protective clothing. Avoid the formation or spread of dust in the air. Avoid contact with the material and breathing its dust.
Ensure that contaminated clothing is thoroughly laundered prior to re-use.

Conditions for safe storage, including any incompatibilities:

Storage conditions: Store in cool, well-ventilated area. Keep container tightly closed. Avoid incompatible materials and conditions - see section 10 of SDS. Do not store near foodstuffs.

Suitable packaging: Must only be kept in original packaging. Stainless steel. PVC or polyethylene. Polypropylene Rubber Glass. Do not use aluminium containers.

Specific end use(s): * No special requirement.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Workplace exposure limits: Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	5 ppm (7 mg/m-3)	10 ppm (14 mg/m-3)	4 mg/m3	–

Exposure controls:

Engineering measures: * Ensure there is sufficient ventilation of the area. Ensure all engineering measures mentioned in section 7 of SDS are in place.

Respiratory protection: * Respiratory protective device with particle filter. Particle filter class P3S (EN143).

Hand protection: * Gloves (alkali-resistant).

Eye protection: * Safety goggles. Face-shield. Ensure eye bath is to hand.

Skin protection: * Protective clothing. Wear full chemical suit. Wear wellingtons. Ensure safety shower is to hand.

Environmental: * No special requirement.

[cont...]

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties:**

State:	Flakes
Colour:	* White to yellow.
Odour:	Unpleasant
Oxidising:	Non-oxidising (by EC criteria)
Solubility in water:	Soluble
Also soluble in:	Alcohol.
Melting point/range°C:	92
Part.coeff. n-octanol/water:	-3.5 log Po/w
Vapour pressure:	2 mmHg @ 20°C
Relative density:	Varies with form.
pH:	* ~ 13 (Aqu Soln)
Other information:	Not applicable.

10. STABILITY AND REACTIVITY

Reactivity: Stable under recommended transport or storage conditions.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions:

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

Conditions to avoid: Heat. Flames. Hot surfaces. Humidity. Moist air. Moisture.

Incompatible materials:

Materials to avoid: Acids. Oxidising agents. Zinc. Aluminium. Copper.

Hazardous decomposition products: In combustion emits toxic fumes of sulphur oxides.
Contact with acids liberates toxic gas.

11. TOXICOLOGICAL INFORMATION**Information on toxicological effects:****Toxicity values:**

Route	Species	Test	Value	Units
ORAL	RAT	LD50	425	mg/kg
ORAL	RBT	LD50	< 340	mg/kg
DERMAL	RBT	LD50	< 340	mg/kg

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Relevant effects for mixture:

Effect	Route	Basis
Acute toxicity (harmful)	ING	Hazardous: calculated.
Acute toxicity (toxic)	DRM	Hazardous: calculated.
Corrosivity	OPT INH DRM	Hazardous: calculated.

Symptoms / routes of exposure:

Skin contact: * Irritation or pain may occur at the site of contact. Severe burns may occur. Blistering may occur. Absorption through the skin may be fatal.

Eye contact: There may be severe pain. Corneal burns may occur. Risk of serious damage to eyes.

Ingestion: May cause throat burns. Causes burns to the gastrointestinal tract. Nausea and stomach pain may occur. There may be vomiting and diarrhoea. Severe poisoning can cause shock, unconsciousness and convulsions.

Inhalation: There may be shortness of breath with a burning sensation in the throat. There may be congestion of the lungs causing severe shortness of breath. May cause irritation of the mucous membranes and respiratory system. Prolonged or repeated exposure may cause ulceration and perforation of the nasal septum.

Delayed / immediate effects: * Immediate effects can be expected after short-term exposure. Symptoms of poisoning may only appear several days later.

Other information: * There is no further information at this time.

12. ECOLOGICAL INFORMATION

Toxicity:

Ecotoxicity values:

Species	Test	Value	Units
DAPHNIA	48H EC50	6.8	mg/l
FISH	96H LC50	1.64	mg/l

Persistence and degradability: * Biodegradable.

Bioaccumulative potential: Product is not expected to bioaccumulate.

Mobility in soil:

Mobility: Soluble in water. Non-volatile. Low mobility in soil.

Results of PBT and vPvB assessment:

PBT identification: This substance is not identified as a PBT substance.

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Other adverse effects: * Very toxic to aquatic organisms. Harmful to flora. May cause long-term adverse effects in the aquatic environment. Large doses cause high/low pH which may affect effluent and sewage treatment processes. Discharge of large quantities may kill fish and other aquatic life due to increase/decrease in pH. Do not allow to enter watercourses or soils. Spillage in sewers or waterways must be avoided.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Disposal operations: * Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: * No information available at this time.

Disposal of packaging: Contaminated containers must not be treated as household waste. Where practical, containers and packaging should be recycled by a licenced contractor.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

UN number: UN1849

UN proper shipping name:

Shipping name: SODIUM SULPHIDE, HYDRATED

Transport hazard class(es):

Transport class: 8

Packing group: II

Environmental hazards:

Environmentally hazardous: Yes

Marine pollutant: No

Special precautions for user:

Special precautions: No special precautions.

Tunnel code: E

Transport category: 2

15. REGULATORY INFORMATION

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

Specific regulations: * This product is a Seveso category/named substance in Annex I of Council Directive 96/82/EC.

Chemical safety assessment: * A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

[cont...]

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Note: The regulatory information given above only indicates the principal regulations specifically Applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Other information: * This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

WARNING: For professional use only.

For decomposition product, Sulphur Dioxide the following levels apply.

WEL (8 hr TWA): 1 ppm (2.5 mg/m-3), WEL (15 min. reference): 1 ppm (2.5 mg/m-3)

Phrases used in s.2 and 3: EUH031: Contact with acids liberates toxic gas.
H302: Harmful if swallowed.
H311: Toxic in contact with skin.
H314: Causes severe skin burns and eye damage.
H400: Very toxic to aquatic life.
R22: Harmful if swallowed.
R24: Toxic in contact with skin.
R31: Contact with acids liberates toxic gas.
R34: Causes burns.
R50: Very toxic to aquatic organisms.

Legal disclaimer: The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.