



SAFETY DATA SHEET

1. Identification of the preparation and of the company

Catalogue No. : S 16329
Product Name : SODIUM SULPHIDE FLAKES

Manufacturer/supplier identification
Company : NICE Chemicals (P) Ltd., Cochin, India
Tel - 0484 2800212, 2802755

Contact for information : Tel. No.- 0484 2802536 Fax : 0484 2802483
Emergency Telephone No. : 0484 2801583 Tele fax No. : 0484 2802483

2. Composition/Information on Ingredients

CAS-No : 27610-45-3 EC No. : 215-211-5
Molar Mass : 78.04 EC Index No. : 016-009-00-8
Molecular Formula : $\text{Na}_2\text{S} \cdot x\text{H}_2\text{O} (x=7-9)$

3. Hazards Identification : Contact with acids liberates toxic gas. Causes burns.

4. First Aid Measures :
After inhalation : Fresh air. Summon doctor.
After skin contact : Wash off with plenty of water. Dab with polythene glycol 400. Immediately remove contaminated clothing.
After eye contact : Rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately summon eye specialist.
After swallowing : Make victim drink plenty of water, (if necessary several liters), avoid vomiting (risk of perforation!). Immediately summon doctor.
Do not attempt to neutralize.

5. Fire-Fighting Measures : Suitable extinguishing media : In adaption to materials stored in the immediate neighbourhood.
Special risks : Development of hazardous combustion gases or vapours possible in the event of fire.
The following may develop in event of fire : Sulphur oxides
Other information : Non-combustible.

6. Accidental release Measures :

Person-related precautionary measures: Avoid generation of dusts; do not inhale dusts. Avoid substance contact.
Procedures for cleaning/absorption : Take up dry. Forward for disposal.
Clean up affected area.
Environmental-protection measures : Do not allow to enter sewerage system.

7. Handling and Storage : Handling : No further requirements.
Storage : Tightly closed. Dry. Protected from light. At +15° C to +25° C.

8. Exposure controls/ personal protection

Respiratory protection : Required when dusts are generated.



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Eye protection : Required
Hand protection : Required

Protective clothing should be selected specially for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Industrial hygiene : Immediately change contaminated clothing. Apply skin-protective barrier cream. Wash hands and face after working with substance.

9. Physical and chemical properties

Form	:	Solid
Colour	:	Colourless
Odour	:	Characteristic
pH value at 100 gm/l. H ₂ O (20° C)	:	~12.7
Melting temperature	:	920° C (anhydrous)
Boiling temperature	:	Not available
Ignition temperature	:	Not available
Flash point	:	Not available
Explosion limits Lower	:	Not available
Upper	:	Not available
Relative vapour density	:	Not available
Density (20° C)	:	~1.43 gm/cm ³
Bulk density	:	~830 kg/m ³
Solubility in water (10° C)	:	470 gm/l.
water (50° C)	:	960 gm/l.

10. Stability & reactivity : Conditions to be avoided : Heating
Substances to be avoided : Acids
Hazardous decomposition products : In the event of fire : sulphur oxides
Further information : Danger of dust explosion.

11. Toxicological information

Acute toxicity : LD₅₀ (oral, rat) : 208 mg/kg (anhydrous substance)
Further toxicological information :
After contact with substance : Danger of eyes, skin, mucous membranes.
After swallowing: mucosal irritations,nausea,vomiting, CNS disorders, cyanosis.
Symptoms in : gastrointestinal tract.
Further data : Further hazardous properties cannot be excluded. The product should be handled with the care usual when dealing with chemicals.

12. Ecological Information : Behavior in environmental compartments : Evaluation
number (FRG) (bacteria) : 5.4 (unhydrous substance);
Evaluation number(FRG)(fish): 4.6(unhydrous substance)
Evaluation number(FRG)(mammal): 7(unhydrous substance);
Ecotoxic effects : Biological effects : Toxic for lower aquatic organisms.



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Toxic effect on fish and plankton. Endangers drinking- water supplies if allowed to enter soil or water. Harmful effect due to pH shift. Fish toxicity :
L.idus LC₅₀ : 25 mg/lit. (anhydrous substance) Daphnia atoxicity: Daphnia magna LC₅₀ : 7.1 mg/lit. (unhy. substance) Bacterial toxicity : Ps.Putida EC₅ :1.6 mg/lit.(anhydrous substance) (maximum permissible toxic concentration)

Algeal toxicity : M.aeruginosa EC₅ : 8 mg/lit.(anhydrous substance) (maximum permissible toxic concentration)
Protozoa : E.sulcatum EC₅ : 14 mg/lit.(anhydrous substance) (maximum permissible toxic concentration)

Further ecologic data : Do not allow to enter waters, waste water, or soil !

13. Disposal Method : Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like house-hold waste or recycled.

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. Approved waste disposal companies which will advise you on how to dispose of special waste.

14. Transport information : GGVS/GGVE class : 8 Number and letter : 45b
Transport over land ADR/RID class : 8 Number and letter : 45b
ADR/RID & GGVS/GGVE : Name of material : SODIUM SULPHIDE
Sea Transport IMDG : IMDG class : 8 UN No. : 1849 Packing group : II
Ems : 8-08 MFAG : 225
Correct Technical Name : SODIUM SULPHIDE

Air Transport : ICAO/IATA class : 8 UN No. : 1849 Packaging group : II
ICAO-TI & IATA-DGR Correct Technical Name : SODIUM SULPHIDE

15. Regulatory Information :
Labelling according to EC Directives

Symbol : C Corrosive

R-phrases : 31-34 Contact with acids liberates toxic gas.
Causes burns.

S-phrases : 26-45 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Water pollution class : 2 (polluting substance)



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16. Other Information :
Reason for alteration :

General update.
Addition in the chapter ecology.
Addition in the chapter toxicology

The information contained herein is based on the present state of our knowledge.
It characterises the product with regard to the appropriate safety precautions. It
does not represent a guarantee of the properties of the product.

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