

# MATERIAL SAFETY DATA SHEET

## SODIUM HYDROSULPHIDE

### Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name	Sodium Hydrosulfide
Chemical name	Sodium hydrogen sulfide
Chemical Family	Inorganic salt
Synonyms	Sodium Sulfhydrate
Molecular formula	NaHS
1.2 Manufacturer	TIANDELI CO., LTD

### Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

2.1 Chemical Ingredients (% by wt.)		
pure( )	mixture( <input checked="" type="checkbox"/> )	
Chemical name	Sodium hydrosulfide	
injurant Ingredients	CAS No.	Content
Sodium hydrosulfide	16721-80-5	70--72%
Water	7732-18-5	28--30%

### Section 3: HAZARDS IDENTIFICATION

Class: 8.2 Corrosive U N No. : 2949  
Incursion approach: EYE, SKIN CONTACT, SKIN ABSORPTION, INGESTION, INHALATION  
health harm: strong irritant and Corrosive. Catalyze eye and breath. Erode nasal cavity, skin and eye. Burn if touch, character: contact cause fat to saponification, come into being compound of solubility, then further damaging; suck cause enteron Burn, mucous membrane rot, bleed and shock.  
circumstance harm: pollution of water. Blast. Apyrous. strong Corrosive and irritant. burn body.

### Section 4 FIRST AND MEASURES

4.1 EYES: Immediately flush with large quantities of water for 30 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye. Obtain immediate medical attention.  
4.2 SKIN: Immediately flush with large quantities of water for 30 minutes. Remove contaminated clothing under a safety shower. Obtain immediate medical attention  
4.3 INGESTION: DO NOT INDUCE VOMITING. If victim is conscious, immediately give 2 to 4 glasses of water. If vomiting does occur, repeat fluid administration. Obtain immediate medical attention.  
4.4 INHALATION: Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start mouth to mouth resuscitation. If heart has stopped beating, external heart massage should be applied. Obtain immediate medical attention.

### Section 5: FIRE FIGHTING MEASURES

5.1 harm character Apyrous, strong Corrosive.  
Release sulfureted hydrogen (H<sub>2</sub>S) if reaction with acid.  
FLASH POINT: Not flammable METHOD USED: NA  
5.2 harmful burning production Sulfur dioxide  
5.3 Method of extinguishing a fire Water, sand earth, foam and carbon dioxide.  
5.4 notice of extinguishing a fire Splash of water and others  
cause burn body

### Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Small release: Confine and Absorb small releases on sand earth or other inert absorbent.

Oxidize residual reactive sulfides with a weak(3-5%) hydrogen peroxide solution.

6.2 Large release: Wear proper protective equipment. Confine area to qualified personnel. Shut off release if safe to do so .Dike spill area to prevent runoff into sewers, drains (potential explosive mixtures of hydrogen sulfide in confined spaces) or surface waterways (potential aquatic toxicity). Recover as much of the solution as possible. Treat remaining material as a small release (above).

## **Section 7: HANDLING AND STORAGE**

7.1 notice of Handling: Wear proper protective equipment (See Section 8). Avoid breathing product vapors. Avoid contact with skin and eyes. Use only in a well ventilated area. Dilute product only in enclosed containers. Wash thoroughly after handling.

7.2 notice of Storage: Store in well ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store tote and smaller containers out of direct sunlight at moderate temperatures [ $<80$  F (27 C)].

## **Section 8: EXPOSURE CONTROLS, PERSONAL PROTECTION**

Allowable upmost chroma                      MAC(mg/m<sup>3</sup>):0.2

8.1 method of inspect                      titration of acid and alkali, luminosity of flame.

8.2 ENGINEERING CONTROLS: Use adequate exhaust ventilation to prevent inhalation of product vapors. Where feasible scrub process or storage vessel vapors with caustic solution. Maintain eyewash/safety shower in areas where chemical is handled.

8.3 RESPIRATORY PROTECTION: If working near open container or storage vessel opening or open tank truck dome cover, wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH (approved or equivalent).

8.4 SKIN PROTECTION: Neoprene rubber gloves, chemical suit and boots should be worn to prevent contact with the liquid. Wash contaminated clothing prior to reuse. Contaminated leather shoes cannot be cleaned and should be discarded.

8.5 EYE PROTECTION: Chemical goggles and a full face shield.

8.6 BODY PROTECTION: Neoprene rubber dress.

8.7 HAND PROTECTION: Neoprene rubber gloves

8.8 OTHERS: At workshop forbid smoking , taking food, drinking. wash hands before eating. Maintain eyewash/safety shower in areas where chemical is handled.

## **Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

9.1 APPEARANCE: Yellowish Flake

9.2 PH value: N/A

9.3 melting point(°C): about 55

9.4 relative density (Water=1): 1.79

9.5 relative steam density ( Water=1): N/A

9.6 saturation VAPOR PRESSURE (Kpa): N/A

9.7 critical temperature(°C): N/A

9.8 critical pressure (mpa): N/A

9.9 flash point(°C): N/A

9.10 upper limit of exploding %(v/v): N/A

9.11 lower limit of exploding %(v/v): N/A

9.12 burn temperature(°C): N/A

9.13 resolvable: soluble in water and alcohol

9.14 main application: dyeing , leather produce, fertilizer, man-made fibre, copper mine. management of waste water.

9.15 boiling point(°C):about 115

9.16 Oder : "Rotten egg" oder

## **Section 10: STABILITY AND REACTIVITY**

- 10.1 STABILITY: easily being deliquescent, Melting point decompose out hydrogen sulfide.  
10.2 KEEP AWAY: STRONG ACID , flammable, water, peroxide.  
10.3 AVOID: moist air.  
10.4 outcome of decomposing : hydrogen sulfide of strong toxicity

### Section 11: TOXICOLOGICAL INFORMATION

Strong toxicity

### Section 12: ECOLOGICAL INFORMATION

ECOLOGICAL toxicity : Strong alkalescence , sulf-, water pollution, especial notice of plant and hydrophyte.

### Section 13: DISPOSAL CONSIDERATIONS

- 13.1 Speciality of trash : toxicity  
13.2 method of disposal :reaction with iron powder in water, then diluting, at last coming into the system of waste water.  
13.3 notice of disposal: refer to concerned rule of law before disposing.

### Section 14: TRANSPORT INFORMATION

- 14.1 CODE OF DANGEROUS CARGO: refer to 95007  
14.2 PACKING MARK : Corrosive  
14.3 Packing Group: II  
14.4 Packing Method : Net 25/900/1000kg PE bag. two layer polyethylene bag with containing a sealed PE liner. or Iron (steel) barrel.  
14.5 notice of TRANSPORT: Forbidding TRANSPORTING TOGETHER WITH acid,flammable, food, and Corrosive. Avoid solarization, drench,be heated. Keep packing in good condition.

### Section 15: RULE OF LAW INFORMATION

Safety Management Rules of Dangerous Chemical Goods(State Department NO. 344, putting in practice since 2002. 3. 1). Rules of Safe Using Chemical Goods in work area ([1996] NO. X issued by Labor Department)and so on.Those Rules have corresponding regulation about Chemical Goods of safe using ,producing, depositing ,transporting. State Standard GB13690-92 《Class and Mark of Usual Chemical Goods》.this Specification is compiled according to State Standard 16483-2000 《 Rules of Compiling Specification of Safy technology of Chemical Goods 》 .

### Section 16: OTHER INFORMATION

Reference literature:

- A. ZhouGuoTai 《Total Specification of Safy technology of Chemical Goods》  
Press of Chymistry and Industry 1977  
B. ZhangWeiFan 《Safy Manual of Usual dangerous Chemical Goods》  
Press of oil of China 1998.

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