# SAFETY DATA SHEET AMMONIUM HYDROSULPHIDE

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

PRODUCT NO.	166047, 22622		
APPLICATION	A preparation for use in surface finishing.		
SUPPLIER	MacDermid plc 198 Golden Hillock Road Birmingham B11 2PN tel: +44 (0) 121 606 8100		
CONTACT PERSON	sdsuk@macdermid.com		
EMERGENCY TELEPHONE	24 Hour Emergency Incident Number +44 (0)1235 239 670 - NCEC (National Chemical Emergency Centre)		

## 2 HAZARDS IDENTIFICATION

Harmful if swallowed. Causes burns. Contact with acids liberates toxic gas.CLASSIFICATION (1999/45)Xn;R22. C;R34. R31.

## **3 COMPOSITION/INFORMATION ON INGREDIENTS**

Name	EC No.	CAS-No.	Content %	Classification (67/548/EEC)
AMMONIUM POLYSULPHIDES	232-989-1	9080-17-5	5-10%	C;R34 R31 N;R50
SODIUM POLYSULPHIDES	215-686-9	1344-08-7	5-10%	T;R25 C;R34 R31 N;R50
HYDROGEN SULPHIDE	231-977-3	7783-06-4	<0.1%	F+;R12 T+;R26 N;R50

The Full Text for all R-Phrases is Displayed in Section 16

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## 4 FIRST-AID MEASURES

## GENERAL INFORMATION

Remove affected person from source of contamination. Chemical burns must be treated by a physician.

## INHALATION

Move the exposed person to fresh air at once. Rinse nose and mouth with water. If respiratory problems, artificial respiration/oxygen. Get medical attention immediately!

## INGESTION

Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Rinse nose, mouth and throat with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention immediately!

#### SKIN CONTACT

Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes. Get medical attention immediately!

## EYE CONTACT

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. To hospital or eye specialist.

## **5 FIRE-FIGHTING MEASURES**

#### EXTINGUISHING MEDIA

Extinguish with foam, carbon dioxide, dry powder or water fog.

## SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapours. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

#### **UNUSUAL FIRE & EXPLOSION HAZARDS**

Beware, risk of formation of toxic and corrosive gases. May form explosive vapour-air mixture in contact with air.

## PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## 6 ACCIDENTAL RELEASE MEASURES

## PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours/spray and contact with skin and eyes. Eye contact MUST be prevented by means of suitable personal protection equipment.

#### **ENVIRONMENTAL PRECAUTIONS**

Collect and dispose of spillage as indicated in section 13. Do not discharge into drains, water courses or onto the ground. Avoid discharge to the aquatic environment.

#### SPILL CLEAN UP METHODS

Wear necessary protective equipment. Absorb with inert, damp, non-combustible material, then flush area with water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Runoff or release to sewer, waterway or ground is forbidden. Inform Authorities if large amounts are involved.

## **7 HANDLING AND STORAGE**

#### USAGE PRECAUTIONS

Avoid inhalation of vapours/spray and contact with skin and eyes. Do not handle broken packages without protective equipment. Use mechanical ventilation in case of handling which causes formation of vapours. Avoid eating, drinking and smoking when using the product. Observe good chemical hygiene practices.

#### STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep separate from food, feedstuffs, fertilisers and other sensitive material.

#### STORAGE CLASS

Corrosive storage.

MIN. STORAGE TEMP (°C) 5

MAX. STORAGE TEMP (°C)

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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Name	STD	TWA	- 8 Hrs	STEL	- 15 Min	Notes
HYDROGEN SULPHIDE	WEL	5 ppm	7 mg/m3	10 ppm	14 mg/m3	

WEL = Workplace Exposure Limit.

#### PROTECTIVE EQUIPMENT



#### ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. All handling to take place in well-ventilated area.

## RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided. Seek advice from supervisor on the companies' respiratory protection standards.

## HAND PROTECTION

Protective gloves must be used if there is a risk of direct contact or splash. Neoprene or PVC gloves are recommended. Seek advice from local supervisor.

#### EYE PROTECTION

Use safety goggles and face shield in case of splash risk.

#### **OTHER PROTECTION**

Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

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## AMMONIUM HYDROSULPHIDE

## HYGIENE MEASURES

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove non-impervious clothing that becomes wet. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties. Eating, smoking and water fountains prohibited in immediate work area.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

Liquid
Orange. / Amber.
Pungent. Rotten eggs.
Miscible with water
1.00 - 1.03 ~11.0

## 10 STABILITY AND REACTIVITY

### STABILITY

Stable under normal temperature conditions and recommended use.

## CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time. Avoid contact with acids. Contact with acids liberates toxic gas.

#### MATERIALS TO AVOID

Acids. Oxidising materials.

### HAZARDOUS DECOMPOSITION PRODUCTS

None under normal conditions. Fire or high temperatures create: Ammonia. Nitrous gases (NOx). Sulphurous gases (SOx). Hydrogen sulphide (H2S).

#### 11 TOXICOLOGICAL INFORMATION

#### INHALATION

May cause irritation to the respiratory system. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

## INGESTION

Harmful if swallowed. Causes burns. May cause chemical burns in mouth, oesophagus and stomach. Swallowing concentrated chemical may cause severe internal injury.

#### SKIN CONTACT

Causes burns. May cause serious chemical burns to the skin.

### EYE CONTACT

Causes burns. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight. Vapour or spray may cause eye damage, impaired sight or blindness.

## 12 ECOLOGICAL INFORMATION

#### ECOTOXICITY

The product contains a substance which is very toxic to aquatic organisms.

### WATER HAZARD CLASSIFICATION

WGK 3

## 13 DISPOSAL CONSIDERATIONS

### **GENERAL INFORMATION**

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

#### **DISPOSAL METHODS**

Environmental manager must be informed of all major spillages. Dispose of waste and residues in accordance with local authority requirements. Do not allow runoff to sewer, waterway or ground.

## 14 TRANSPORT INFORMATION

## AMMONIUM HYDROSULPHIDE



PROPER SHIPPING NAME	AMMONIUM POLYSULPHIDE SOLUTION
UN NO. ROAD	UN2818
ADR CLASS NO.	8 (6.1)
ADR PACK GROUP	II
TUNNEL RESTRICTION CODE	(E)
UN NO. SEA	UN2818
IMDG CLASS	8 (6.1)
IMDG PACK GR.	II
EMS	F-A, S-B

## **15 REGULATORY INFORMATION**

LABELLING				
		×		
	Corrosive	Harmful		
CONTAINS	AMMONIUM POLYSULPHIDES			
	SODIUM POLYSULPHIDES			
RISK PHRASES				
	R22	Harmful if swallowed.		
	R31	Contact with acids liberates toxic gas.		
	R34	Causes burns.		
SAFETY PHRASES				
	S24/25	Avoid contact with skin and eyes.		
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.		
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.		
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).		
	S60	This material and its container must be disposed of as hazardous waste.		

## EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP), amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

## STATUTORY INSTRUMENTS

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

## APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

## GUIDANCE NOTES

Workplace Exposure Limits EH40.

## **16 OTHER INFORMATION**

## **REVISION DATE**

25/05/2006

## SAFETY DATA SHEET STATUS

Approved.

23/11/1998

SIGNATURE

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<b>RISK PHRASES IN FULL</b>	
R34	Causes burns.
R31	Contact with acids liberates toxic gas.
R12	Extremely flammable.
R22	Harmful if swallowed.
R25	Toxic if swallowed.
R26	Very toxic by inhalation.
R50	Very toxic to aquatic organisms.

#### DISCLAIMER

This information relates only to the specific material as supplied and may not be valid for such material if used in combination with any other material(s) or in any other process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. The data should not be construed as guaranteeing specific properties of the product described or its suitability for a particular application, nor does it make any warranty, either express or implied of merchantability for the product itself. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.