

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

PRODUCT : **HYDROX**

APPLICATION : DESCALER

COMPANY/UNDERTAKING IDENTIFICATION

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2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL DESCRIPTION : ACID DESCALER

HAZARDOUS COMPONENTS : PHOSPHORIC ACID

3. HAZARDS IDENTIFICATION

The most important hazards are : CORROSIVE ACID

4. FIRST AID MEASURES

EYES Immediately flush with eye wash or clean water for at least 15 minutes.
Obtain medical attention.

SKIN Wash thoroughly with plenty of water. Remove contaminated clothing
& continue washing. Obtain medical attention if symptoms develop.

INHALATION Remove to fresh air & remove contaminated clothing. If not breathing
give artificial respiration. If breathing is difficult, give oxygen. Obtain
medical attention.

INGESTION Do not induce vomiting. If patient is conscious wash mouth with water,
give a little water to drink. Obtain medical attention.

5. FIRE FIGHTING MEASURES

EXTINGUISHING Consider what other flammable materials are present and act accordingly.

MEDIA

HAZARDS Although Hydrox is non flammable it will react with some metals, eg.
aluminium, tin, zinc, to form flammable hydrogen gas.

UNSUITABLE MEDIA Nothing specified

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

PERSONAL Wear gloves and goggles.

PRECAUTIONS:

ENVIRONMENTAL

PRECAUTIONS:

Do not allow large amounts to enter sewers, storm drains, surface waters
and soil. Notify National Rivers Authority and local Environmental Health
Officer if major spillage occurs. Neutralised material can be washed down in small
amounts.

RECOVERY Can be absorbed on sand or soil. Neutralised material should be collected
into containers if possible.

MAJOR SPILLAGE: Contain spill with sand or soil. Collect as appropriate. Note
environmental precautions.

MINOR SPILLAGE: Neutralise carefully (reaction) with lime, soda ash, calcium carbonate or bicarbonate.
Carbon dioxide & mist will be formed so area must be well ventilated.

7. HANDLING AND STORAGE (IN NORMAL USE)

STORAGE: Keep away from direct sun.
Store away from alkalis, sulphides, cyanides and metal powders.
Store in original containers.
Keep soda ash or lime available for small spills.

HANDLING: Prevent contact with skin and eyes. Contaminated clothing must be washed before re-use. Avoid breathing mist. Suitable training should, as always, be given.

8. EXPOSURE CONTROLS / EXPOSURE PROTECTION (NORMAL USE)

OCCUPATIONAL EXPOSURE LIMITS	OEL	OEL
	Long Term	Short Term
	1 mg/cu m	3 mg/cu m

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY Not normally required. If misting occurs, use an appropriate respirator for acid gases/mists.

HAND Rubber or PVC gloves.

EYE Use chemical splash proof goggles.

SKIN If skin contact or contamination of clothing is likely, protective clothing must be worn.

9. PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE	Red
ODOUR	Acidic
PH	Strongly acid.
BOILING POINT	N/A
MELTING POINT	N/A
FLASHPOINT (°C)	N/A
UPPER FLAM. LIMIT	N/A
LOWER FLAM. LIMIT	N/A
EXPLOSIVE PROPERTIES	N/A
VAPOUR PRESSURE	Not determined
SOLUBILITY	Completely soluble in water

10. STABILITY AND REACTIVITY

STABILITY: Stable

MATERIALS TO AVOID : Strong caustics will liberate much heat and cause spattering.
Will react with some metals, eg. aluminium, tin, zinc, to form flammable hydrogen gas. Sulphide, phosphide, cyanide, carbide & silicides will liberate toxic gas.

RECOMMENDED MATERIALS FOR EQUIPMENT : 316, PLASTICS

HAZARDOUS DECOMPOSITION PRODUCTS :

Toxic gasses & vapours (phosphoric acid fumes) may be released.
May liberate phosphorous oxide.

11. TOXICOLOGICAL INFORMATION	ACUTE EFFECTS
EYES	Irritation & burns. No permanent damage if treated immediately.
SKIN	Irritation & burns, dryness & cracking. Dermatitis possible from prolonged exposure.
INGESTION	Nausea, difficult breathing, shock, acidosis, convulsions & collapse.
INHALATION	Vapours & mists are corrosive to nose, throat and mucus membranes.
CARCINOGENICITY	Not considered to be a carcinogen.
MUTAGENICITY	Not considered to be a mutagen.
REPRODUCTIVE EFFECTS	None identified.
CHRONIC EFFECTS	Acute effects predominate.

12. ECOLOGICAL INFORMATION	
MOBILITY	
PERSISTANCE & DEGRADABILITY	Acidity may be reduced by natural minerals but phosphate may persist indefinitely.
BIO ACCUMULATION	
AQUATIC TOXICITY	TLm mosquito fish 138 mg/L/24-96hr. in turbid water @ 22-24 C
OTHER	This is an acidic substance & a nutrient for undesirable algae. It will cause local damage to flora & fauna.

13. DISPOSAL CONSIDERATIONS	
DISPOSAL METHODS	Neutralised material can be buried in an approved land fill. Large quantities of soil/sand will require a specialist waste disposal firm.
CONTAMINATED PACKAGING	Empty completely and flush thoroughly with fresh water.

14. TRANSPORT INFORMATION (REGULATIONS)	
PACKAGING (Size & Description)	5 litre bottles, 4 per carton
TRANSPORT CLASSIFICATION	CORROSIVE
SUBSTANCE IDENTIFICATION NUMBER	UN 1805
PROPER SHIPPING NAME	Phosphoric acid
ICAO/IATA/IMDG CLASS	8
SUBSIDIARY RISK	-
PACKING GROUP	III
ADR CLASS	8
TRANSPORT HAZARD SYMBOL	CORROSIVE
HAZARD IDENT NUMBER	80
EMERGENCY ACTION CODE	
OTHER	

15. REGULATORY INFORMATION (Supply & Labelling)	
SUPPLY CLASSIFICATION	CORROSIVE
HAZARD PICTOGRAM	
RISK PHRASES	34, Causes burns.
SAFETY PHRASES	26 In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

16. OTHER INFORMATION	
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The information contained in this document only covers the hazards presented by this material, it does not constitute a workplace risk assessment.

The information contained in this Safety Data Sheet is based on present knowledge. It provides guidance on health, safety and environmental aspects of the product. The specific conditions of use of the product are outside the suppliers control.

The data and advice given apply when the product is sold for the stated application or applications. The product is not sold as suitable for any other application. Use of the product for applications other than as stated in this sheet may give rise to risks not mentioned in this sheet. You should not use the product other than for the stated application or applications without seeking advice from us.

If you have purchased the product for supply to a third party for use at work, it is your duty to take all necessary steps to secure that any person handling or using the product is provided with the information in this sheet.

If you are an employer, it is your duty to tell your employees and others who may be affected of any hazards described in this sheet and of any precautions which should be taken.

17. REVISIONS AND DATES

Revision 1.1 Dec 1998. Change of address and telephone numbers