

SAFETY DATA SHEET

HIDROX

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Compilation date: 23-03-2010

Revision date: 11/05/2017

Revision No: 6.1

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: HIDROX

Product code: 003

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: * Descaler for water-cooled condensers and cooling towers PC35: Washing and cleaning products (including solvent based products).

1.3. Details of the supplier of the safety data sheet

Company name: Advanced Engineering Ltd

Guardian House

Stroudley Road

Basingstoke

Hampshire

RG24 8NL

United Kingdom

Tel: +44(0)1256460300

Fax: +44(0)1256462266

Email: sales@advancedengineering.co.uk

1.4. Emergency telephone number

Emergency tel: Advanced Engineering Ltd (24hr) +44 (0) 1256 854318

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Skin Corr. 1B: H314; -: EUH208

Most important adverse effects: Contains inhibitor 6035. May produce an allergic reaction. Causes severe skin burns and eye damage.

2.2. Label elements

Label elements:

Hazard statements: EUH208: Contains inhibitor 6035. May produce an allergic reaction.

H314: Causes severe skin burns and eye damage.

Hazard pictograms: GHS05: Corrosion



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Signal words: Danger

Precautionary statements: * P262: Do not get in eyes, on skin, or on clothing.

P264: Wash hands thoroughly after handling.

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

P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+361+353: IF ON SKIN (or hair): Take off 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.

2.3. Other hazards

PBT: This product is not identified as a PBT / vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

ORTHOPHOSPHORIC ACID

EINECS	CAS	PBT / WEL	CLP Classification	Percent
231-633-2	7664-38-2	-	Skin Corr. 1B: H314	50-70%

INHIBITOR 6035

-	-	-	-	<1%
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Non-classified ingredients:

NON IONIC SURFACTANT

EINECS	CAS	PBT / WEL	CLP Classification	Percent
-	68439-51-0	-	Aquatic Chronic 3: H412	<1%

Section 4: First aid measures

4.1. 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.

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. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If

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unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: Irritation or pain may occur at the site of contact. Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: There may be severe pain. The eyes may water profusely. Corneal burns may occur. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after long-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Corrosive. In combustion emits toxic fumes.

5.3. Advice for fire-fighters

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

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: * Do not attempt to take action without suitable protective clothing - see section 8 of SDS. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. Remove all incompatible materials as outlined in section 10 of SDS.

6.2. Environmental precautions

Environmental precautions: In bulk concentrated form, avoid spillage into drains, sewers and water courses. Contain the spillage using bunding.

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6.3. Methods and material for containment and cleaning up

Clean-up procedures: * Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water. Refer to section 13 of SDS for suitable method of disposal.

6.4. Reference to other sections

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

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.
Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): * PC35: Washing and cleaning products (including solvent based products). Descaler for water-cooled condensers and cooling towers

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

ORTHOPHOSPHORIC ACID

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1 mg/m ³	2 mg/m ³	-	-

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: * Respiratory protection not required.

Hand protection: Impermeable gloves.

Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Impermeable protective clothing.

Environmental: In bulk concentrated form, avoid spillage into drains, sewers and water courses.

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Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: * Red-brown

Odour: Barely perceptible odour

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Miscible in all proportions

pH: < 1

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. 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.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Alkalis.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

ORTHOPHOSPHORIC ACID

ORL	RAT	LD50	1530	mg/kg
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ORAL	RAT	LD50	>2000	mg/kg
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NON IONIC SURFACTANT

ORAL	-	LD50	>2000 - < 5000	mg/kg
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Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: Irritation or pain may occur at the site of contact. Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: There may be severe pain. The eyes may water profusely. Corneal burns may occur. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after long-term exposure.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

NON IONIC SURFACTANT

DUCKWEED (Lemna sp.)	EC50	> 1 - < 10	mg/l
Daphnia magna	EC50	> 1 - < 10	mg/l
FISH	LC50	> 1 - < 10	mg/l

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: The biodegradability of the surfactants contained in this product are in accordance with the requirements of the EU Detergent Regulation (EC/648/2004). Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

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12.4. Mobility in soil

Mobility: Readily absorbed into soil. Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: * Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

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

Recovery operations: * Regeneration of acids or bases. Recovery of components used for pollution abatement.

Waste code number: * 16 03 03

Disposal of packaging: May be reused following decontamination. Clean with water. Dispose of as normal industrial waste.

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

Section 14: Transport information

14.1. UN number

UN number: UN1760

14.2. UN proper shipping name

Shipping name: CORROSIVE LIQUID, N.O.S.
(PHOSPHORIC ACID)

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: II

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 2

IMDG seg. group: * 18

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Section 15: Regulatory information

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

Specific regulations: * Regulation (EC) No 1272/2008 of the European Parliament and of the Council of the 16th December 2008 on Classification, labelling and packaging of Substances and Mixtures. The biodegradability of the surfactants contained in this product are in accordance with the requirements of the EU Detergent Regulation (EC/648/2004).

15.2. Chemical Safety Assessment

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

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

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

Phrases used in s.2 and s.3: EUH208: Contains <name of sensitising substance>. May produce an allergic reaction.
H314: Causes severe skin burns and eye damage.
H412: Harmful to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.