

SAFETY DATA SHEET

(DUPLEX) HYDROSCALE

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Compilation date: 17/05/2016

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Revision No: 5

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

1.1. Product identifier

Product name: (DUPLEX) HYDROSCALE

Product code: HC1525

Synonyms: HC1525

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

Use of substance / mixture: FOR PROFESSIONAL AND INDUSTRIAL USE ONLY. Water based acid liquid descaler and cleaner.

1.3. Details of the supplier of the safety data sheet

Company name: LIQUID SCIENCE SOLUTIONS LIMITED

Bentley Wood Way

Network 65 Business Park

Hapton, Burnley

Lancashire

BB11 5ST

UK GB & NI

Tel: +44(0)1282 831251

Fax: +44(0)1282 450456

Email: info@liquidscience.co.uk

1.4. Emergency telephone number

Emergency tel: +44(0)1282 831 251

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Skin Corr. 1C: H314

Most important adverse effects: Causes severe skin burns and eye damage.

2.2. Label elements

Label elements:

Hazard statements: H314: Causes severe skin burns and eye damage.

Hazard pictograms: GHS05: Corrosion



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Signal words: Danger

Precautionary statements: P260: Do not breathe spray.

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

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water .

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P315: Get immediate medical advice/attention.

Haz. ingredients (label): Contains: 1-HYDROXY ETHANE-1,1-DIPHOSPHONIC ACID

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:

ETIDRONIC ACID - REACH registered number(s): 01-2119510391-53-xxxx

EINECS	CAS	PBT / WEL	CLP Classification	Percent
-	2809-21-4	-	Met. Corr. 1: H290; Eye Dam. 1: H318; Acute Tox. 4: H302	1-10%

Non-classified ingredients:

CITRIC ACID ANHYDROUS POWDER - REACH registered number(s): 01-2119457026-42

EINECS	CAS	PBT / WEL	CLP Classification	Percent
201-069-1	77-92-9	-	-	1-10%

PRIMARY ALCOHOL ETHOXYLATE C9-11 6 MOLE - REACH registered number(s): 01-2119980051-45-XXXX

-	68439-46-3	-	Acute Tox. 4: H302; Eye Dam. 1: H318	<1%
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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.

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Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If 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: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: 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 short-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: Notify the police and fire brigade immediately. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

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.

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6.4. Reference to other sections

Reference to other sections: Refer to section 8 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.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

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

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves.

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

Skin protection: Impermeable protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Perceptible odour

Evaporation rate: Slow

Solubility in water: Highly soluble

Viscosity: Non-viscous

Boiling point/range°C: 100

Flammability limits %: lower: Not applicable.

Flash point°C: Not applicable.

Autoflammability°C: Not applicable.

Relative density: 1.030

VOC g/l: 0

Melting point/range°C: 0

upper: Not applicable.

Part.coeff. n-octanol/water: No data available.

Vapour pressure: Not applicable.

pH: 0.5 - 1.5

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9.2. Other information

Other information: No data available.

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. Strong acids.

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:

ETIDRONIC ACID

ORL	RAT	LD50	2400	mg/Kg
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Non-classified ingredients:

CITRIC ACID ANHYDROUS POWDER

ORL	MUS	LD50	5040	mg/kg
ORL	RAT	LD50	3	gm/kg
SCU	RAT	LD50	5500	mg/kg

PRIMARY ALCOHOL ETHOXYLATE C9-11 6 MOLE

IHL	RAT	LC50	>5	mg/l
ORL	RAT	LD50	200-2000	mg/kg
SKN	RAT	LD50	>2000	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

Excluded hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	-	No hazard: calculated
Acute toxicity (ac. tox. 3)	-	No hazard: calculated
Acute toxicity (ac. tox. 2)	-	No hazard: calculated
Acute toxicity (ac. tox. 1)	-	No hazard: calculated
Respiratory/skin sensitisation	-	No hazard: calculated
Germ cell mutagenicity	-	No hazard: calculated
Carcinogenicity	-	No hazard: calculated
Reproductive toxicity	-	No hazard: calculated
STOT-single exposure	-	No hazard: calculated
STOT-repeated exposure	-	No hazard: calculated
Aspiration hazard	-	No hazard: calculated

Symptoms / routes of exposure

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: 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 short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

ETIDRONIC ACID

RAINBOW TROUT (<i>Oncorhynchus mykiss</i>)	48H EC50	878	mg/l
<i>Oncorhynchus mykiss</i>	96H LC50	300	mg/l

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PRIMARY ALCOHOL ETHOXYLATE C9-11 6 MOLE

FISH	96H LC50	1-10	mg/l
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12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

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: Not applicable.

Waste code number: 20 01 14

Disposal of packaging: Dispose of as normal industrial waste. Clean with water.

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.
(1-HYDROXY ETHANE-1,1-DIPHOSPHONIC ACID)

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

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14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

Section 15: Regulatory information

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

Specific regulations: Not applicable.

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.

IMPORTANT NOTE:

Risk phrases in this section below relate to the INDIVIDUAL COMPONENTS in the formulation when used at their FULL CONCENTRATIONS, and not at the reduced levels in the mixed product.

See sections 2 and 3 for the calculated hazard and risk phrases for the blended product.

Phrases used in s.2 and s.3: H290: May be corrosive to metals.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

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.