# SAFETY DATA SHEET

(DUPLEX) HYDROSCALE



**Compilation date:** 17/05/2016

**Revision date:** 01.02.17

**Revision No:** 2

## 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.

### 1.3. Details of the supplier of the safety data sheet

**Company name:** DUPLEX CLEANING MACHINES (UK) LTD

Unit 27, Joseph Wilson Industrial Estate

Millstrood Road

Whitstable

Kent

CT5 3PS

United Kingdom

**Tel:** 01227 771 276

**Fax:** 01227 770 220

**Email:** kevin.scott@duplex-cleaning.com

### 1.4. Emergency telephone number

**Emergency tel:** 01227 771 276

(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

**Signal words:** Danger

[cont...]

**Precautionary statements:** P102: Keep out of reach of children.

P260: Do not breathe spray.

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.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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:**

1-HYDROXY ETHANE-1,1-DIPHOSPHONIC ACID

| EINECS | CAS | PBT / WEL | CLP Classification | Percent |
|---|---|---|---|---|
| 220-552-8 | 2809-21-8 | - | Met. Corr. 1: H290; Eye Dam. 1: H318; Acute Tox. 4: H302 | 1-10% |

**Non-classified ingredients:**

CITRIC ACID ANHYDROUS POWDER

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

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| | | | | |
|---|---|---|---|---|
| - | 68439-45-2 | - | Acute Tox. 4: H302; Eye Dam. 1: H318 | <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. Transfer to hospital as soon as possible.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Move to fresh air in case of accidental inhalation of vapours. Consult a doctor.

[cont...]

### 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. Water based product. Advice relates to dry residues after water has evaporated.

### 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:** 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. Wash the spillage site with large amounts of water.

### 6.4. Reference to other sections

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

[cont...]

## 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

**Melting point/range°C:** 0

**Flammability limits %: lower:** Not applicable.

**upper:** Not applicable.

**Flash point°C:** Not applicable.

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

**Autoflammability°C:** Not applicable.

**Vapour pressure:** Not applicable.

**Relative density:** 1.030

**pH:** 0.5 - 1.5

**VOC g/l:** 0

[cont...]

### 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 bases. Strong reducing agents.

### 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:**

**1-HYDROXY ETHANE-1,1-DIPHOSPHONIC ACID**

| | | | | |
|---|---|---|---|---|
| ORL | RAT | LD50 | 2400 | mg/Kg |

**CITRIC ACID ANHYDROUS POWDER**

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

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

[cont...]

**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:**

**1-HYDROXY ETHANE-1,1-DIPHOSPHONIC ACID**

| | | | |
|---|---|---|---|
| RAINBOW TROUT (Oncorhynchus mykiss) | 48H EC50 | 878 | mg/l |
| Oncorhynchus mykiss | 96H LC50 | 300 | mg/l |

[cont...]

**PRIMARY ALCOHOL ETHOXYLATE CD916**

| | | | |
|---|---|---|---|
| FISH | 96H LC50 | 1-10 | mg/l |

### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable. The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

### 12.4. Mobility in soil

**Mobility:** Readily absorbed into soil. Volatile. 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:** 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

[cont...]

### 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 phases 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. For professional and industrial use only.