

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : HG limescale remover concentrate  
UFI : WAFX-D8FF-W00S-HJY3  
Product code : 100 ART  
Type of product : Detergent  
Product group : Trade product

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

##### 1.2.1. Relevant identified uses

Intended for general public  
Main use category : Consumer use

##### 1.2.2. Uses advised against

Restrictions on use : All other uses not recommended above

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

##### Manufacturer

HG International B.V.  
P.J. Oudweg 41  
NL- 1314 CJ Almere  
The Netherlands  
T +31 (0)36 54 94 700  
[safety@hg.eu](mailto:safety@hg.eu) - [www.hg.eu](http://www.hg.eu)

##### Importer

HG UKI LTD  
Weston Business Centre  
Parsonage Road  
UK- CM22 6PU Takeley – Essex  
United Kingdom  
T +44 (0) 1206 822 744  
[www.hg.eu](http://www.hg.eu)

#### 1.4. Emergency telephone number

Emergency number : +31 (0)36 54 94 777  
Only for medical personnel  
Mon-Fri 09:00 AM - 05:00 PM (CEST)

| Country        | Organisation/Company   | Address                  | Emergency number | Comment                           |
|----------------|--|--------------------------|------------------|-----------------------------------|
| United Kingdom | National Poisons Information Service<br>(Birmingham Centre)<br>City Hospital                     | Dudley Road<br>B18 7QH   | 0344 892 0111    | Only for healthcare professionals |
| United Kingdom | Guy's & St Thomas' Poisons Unit<br>Medical Toxicology Unit, Guy's & St<br>Thomas' Hospital Trust | Avonley Road<br>SE14 5ER | +44 20 7188 7188 |                                   |

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302  
Skin corrosion/irritation, Category 1 H314  
Serious eye damage/eye irritation, Category 1 H318  
Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage.

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05

GHS07

Signal word (CLP)

: Danger

Contains

: Phosphoric acid; Oxalic acid; Isotridecanol, ethoxylated

Hazard statements (CLP)

: H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP)

: P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear eye protection, protective gloves.

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/shower.

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

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0,1\%$  assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name   | Product identifier  | Conc. (% w/w)    | Classification according to Regulation (EC) No. 1272/2008 [CLP]        |
|--|---|------------------|--|
| Phosphoric acid substance with a Community workplace exposure limit (Note B) | CAS-No.: 7664-38-2<br>EC-No.: 231-633-2<br>EC Index-No.: 015-011-00-6<br>REACH-no: 01-2119485924-24 | $\geq 15 - < 25$ | Met. Corr. 1, H290<br>Acute Tox. 4 (Oral), H302<br>Skin Corr. 1B, H314 |
| propan-2-ol; isopropyl alcohol; isopropanol                                  | CAS-No.: 67-63-0<br>EC-No.: 200-661-7<br>EC Index-No.: 603-117-00-0<br>REACH-no: 01-2119457558-25   | $\geq 2 - < 5$   | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336            |
| Isotridecanol, ethoxylated   | CAS-No.: 69011-36-5<br>EC-No.: 931-138-8  | $\geq 1 - < 2$   | Acute Tox. 4 (Oral), H302<br>Eye Dam. 1, H318                          |

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Name   | Product identifier   | Conc. (% w/w) | Classification according to Regulation (EC) No. 1272/2008 [CLP]              |
|--|--|---------------|--|
| Oxalic acid<br>substance with a Community workplace exposure limit | CAS-No.: 144-62-7<br>EC-No.: 205-634-3<br>EC Index-No.: 607-006-00-8<br>REACH-no: 01-2119534576-33 | ≥ 1 – < 2     | Acute Tox. 4 (Oral), H302<br>Acute Tox. 4 (Dermal), H312<br>Eye Dam. 1, H318 |

### Specific concentration limits:

| Name                       | Product identifier  | Specific concentration limits   |
|----------------------------|---|---|
| Phosphoric acid            | CAS-No.: 7664-38-2<br>EC-No.: 231-633-2<br>EC Index-No.: 015-011-00-6<br>REACH-no: 01-2119485924-24 | ( 10 ≤C < 25) Skin Irrit. 2, H315<br>( 10 ≤C < 25) Eye Irrit. 2, H319<br>( 25 ≤C ≤ 100) Skin Corr. 1B, H314 |
| Isotridecanol, ethoxylated | CAS-No.: 69011-36-5<br>EC-No.: 931-138-8  | ( 1 ≤C < 10) Eye Irrit. 2, H319<br>( 10 ≤C < 100) Eye Dam. 1, H318  |

Note B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: '... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures general            | : Call a physician immediately. If you feel unwell, seek medical advice (show the label where possible).   |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing.   |
| First-aid measures after skin contact | : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Do not remove clothing if it sticks to the skin. |
| First-aid measures after eye contact  | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.   |
| First-aid measures after ingestion    | : Rinse mouth. Do not induce vomiting. Call a physician immediately.   |

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

|                                     |                           |
|-------------------------------------|---------------------------|
| Symptoms/effects after skin contact | : Burns.                  |
| Symptoms/effects after eye contact  | : Serious damage to eyes. |
| Symptoms/effects after ingestion    | : Burns.                  |

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                |  |
|--------------------------------|--|
| Suitable extinguishing media   | : Water spray. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use a heavy water stream.               |

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe vapours.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Do not touch or walk on the spilled product.  
Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe vapours. Wear personal protective equipment.  
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Remove contaminated clothes.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool. Keep away from (strong) bases. Protect from freezing.  
Incompatible materials : Keep away from (strong) bases.  
Storage temperature : 0 – 35 °C  
Heat and ignition sources : Keep away from heat and direct sunlight.  
Storage area : Store according to local legislation.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| <b>Phosphoric acid (7664-38-2)</b>                           |                                       |
|--|---------------------------------------|
| <b>EU - Indicative Occupational Exposure Limit (IOEL)</b>    |                                       |
| Local name   | Orthophosphoric acid                  |
| IOEL TWA   | 1 mg/m <sup>3</sup>                   |
| IOEL STEL  | 2 mg/m <sup>3</sup>                   |
| Regulatory reference   | COMMISSION DIRECTIVE 2000/39/EC       |
| <b>United Kingdom - Occupational Exposure Limits</b>         |                                       |
| Local name   | Orthophosphoric acid                  |
| WEL TWA (OEL TWA) [1]  | 1 mg/m <sup>3</sup>                   |
| WEL STEL (OEL STEL)  | 2 mg/m <sup>3</sup>                   |
| Regulatory reference   | EH40/2005 (Fourth edition, 2020). HSE |
| <b>Oxalic acid (144-62-7)</b>                                |                                       |
| <b>EU - Indicative Occupational Exposure Limit (IOEL)</b>    |                                       |
| Local name   | Oxalic acid                           |
| IOEL TWA   | 1 mg/m <sup>3</sup>                   |
| Regulatory reference   | COMMISSION DIRECTIVE 2006/15/EC       |
| <b>United Kingdom - Occupational Exposure Limits</b>         |                                       |
| Local name   | Oxalic acid                           |
| WEL TWA (OEL TWA) [1]  | 1 mg/m <sup>3</sup>                   |
| WEL STEL (OEL STEL)  | 2 mg/m <sup>3</sup>                   |
| Regulatory reference   | EH40/2005 (Fourth edition, 2020). HSE |
| <b>propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)</b> |                                       |
| <b>United Kingdom - Occupational Exposure Limits</b>         |                                       |
| Local name   | Propan-2-ol                           |
| WEL TWA (OEL TWA) [1]  | 999 mg/m <sup>3</sup>                 |
| WEL TWA (OEL TWA) [2]  | 400 ppm                               |
| WEL STEL (OEL STEL)  | 1250 mg/m <sup>3</sup>                |
| WEL STEL (OEL STEL) [ppm]                                    | 500 ppm                               |
| Regulatory reference   | EH40/2005 (Fourth edition, 2020). HSE |

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### 8.2.2. Personal protection equipment

##### Personal protective equipment:

Safety glasses. Gloves. Protective clothing.

##### Personal protective equipment symbol(s):



##### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses with side shields

| Eye protection                   |                       |                 |          |
|----------------------------------|-----------------------|-----------------|----------|
| Type                             | Field of application  | Characteristics | Standard |
| Safety glasses with side shields | Normal use conditions |                 | EN 166   |
| Chemical goggles or face shield  | Droplet               |                 | EN 166   |

##### 8.2.2.2. Skin protection

##### Skin and body protection:

Long sleeved protective clothing. Chemical resistant safety shoes

| Skin and body protection           |              |
|------------------------------------|--------------|
| Type                               | Standard     |
| Chemical resistant safety shoes    | EN ISO 20345 |
| Use chemically protective clothing | EN 14605     |

##### Hand protection:

Protective gloves

| Hand protection   |                      |                   |                |             |            |
|-------------------|----------------------|-------------------|----------------|-------------|------------|
| Type              | Material             | Permeation        | Thickness (mm) | Penetration | Standard   |
| Disposable gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | 0.35           |             | EN ISO 374 |
| Disposable gloves | Butyl rubber         | 6 (> 480 minutes) | 0.5            |             | EN ISO 374 |

##### 8.2.2.3. Respiratory protection

##### Respiratory protection:

No respiratory protection needed under normal use conditions

##### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

##### Environmental exposure controls:

Avoid release to the environment.

##### Other information:

Do not eat, drink or smoke during use.

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|   |                  |
|---|------------------|
| Physical state                                  | : Liquid         |
| Colour  | : Colourless.    |
| Odour   | : Fresh.         |
| Odour threshold                                 | : Not available  |
| Melting point                                   | : Not applicable |
| Freezing point                                  | : Not available  |
| Boiling point                                   | : Not available  |
| Flammability                                    | : Non flammable. |
| Explosive limits                                | : Not available  |
| Lower explosion limit                           | : Not available  |
| Upper explosion limit                           | : Not available  |
| Flash point                                     | : > 63 °C        |
| Auto-ignition temperature                       | : Not available  |
| Decomposition temperature                       | : Not available  |
| pH  | : 0.3            |
| Viscosity, kinematic                            | : Not available  |
| Solubility                                      | : Not available  |
| Partition coefficient n-octanol/water (Log Kow) | : Not available  |
| Vapour pressure                                 | : Not available  |
| Vapour pressure at 50°C                         | : Not available  |
| Density   | : Not available  |
| Relative density                                | : 1.14           |
| Relative vapour density at 20°C                 | : Not available  |
| Particle characteristics                        | : Not applicable |

#### 9.2. Other information

##### 9.2.1. Information with regard to physical hazard classes

Not sustained combustibility : Yes

##### 9.2.2. Other safety characteristics

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Keep away from (strong) bases.

#### 10.5. Incompatible materials

Attacks many metals releasing highly flammable gas (hydrogen) which generates fire or explosion hazards. Slightly reactive or incompatible with the following materials: Alkalines. Strong bases.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

| HG limescale remover concentrate |                      |
|----------------------------------|----------------------|
| ATE CLP (oral)                   | 500 mg/kg bodyweight |

| Phosphoric acid (7664-38-2) |                         |
|-----------------------------|-------------------------|
| LD50 oral rat               | 3500 mg/kg Source: ECHA |
| LD50 oral                   | 1530 mg/kg bodyweight   |
| LD50 dermal rabbit          | 2740 mg/kg Source: ECHA |
| LD50 dermal                 | 2740 mg/kg bodyweight   |

| Oxalic acid (144-62-7) |                                       |
|------------------------|---------------------------------------|
| LD50 oral rat          | 375 mg/kg Source: ECHA                |
| LD50 oral              | 375 mg/kg bodyweight                  |
| LD50 dermal rabbit     | 20000 mg/kg bodyweight Animal: rabbit |
| LD50 dermal            | 20000 mg/kg bodyweight                |

| Isotridecanol, ethoxylated (69011-36-5) |   |
|---|---|
| LD50 oral                               | > 2000 mg/kg bodyweight   |
| LD50 dermal rat                         | > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)                        |
| LD50 dermal rabbit                      | ≈ 5960 mg/kg bodyweight Animal: rabbit, Animal sex: male, Remarks on results: other:                              |
| LD50 dermal                             | > 2000 mg/kg bodyweight   |
| LC50 Inhalation - Rat                   | > 1.6 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other: |

| propan-2-ol; isopropyl alcohol; isopropanol (67-63-0) |                          |
|---|--------------------------|
| LD50 oral rat   | 5840 mg/kg Source: ECHA  |
| LD50 oral   | 4396 mg/kg bodyweight    |
| LD50 dermal rabbit                                    | 12800 mg/kg Source: ECHA |
| LD50 dermal   | 12800 mg/kg bodyweight   |
| LC50 Inhalation - Rat (Dust/Mist)                     | 46600 mg/l               |

Skin corrosion/irritation : Causes severe skin burns.  
pH: 0.3

| Oxalic acid (144-62-7) |     |
|------------------------|-----|
| pH                     | 1.3 |

Serious eye damage/irritation : Causes serious eye damage.  
pH: 0.3

| Oxalic acid (144-62-7) |     |
|------------------------|-----|
| pH                     | 1.3 |

Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified



# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| <b>propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)</b> |  |
|--|--|
| IARC group   | 3 - Not classifiable   |
| Reproductive toxicity  | : Not classified   |
| STOT-single exposure   | : Not classified   |
| <b>propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)</b> |  |
| STOT-single exposure   | May cause drowsiness or dizziness.   |
| STOT-repeated exposure                                       | : Not classified   |
| <b>Oxalic acid (144-62-7)</b>                                |  |
| NOAEL (oral, rat, 90 days)                                   | ≈ 63 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other: |
| <b>Isotridecanol, ethoxylated (69011-36-5)</b>               |  |
| NOAEL (oral, rat, 90 days)                                   | ≥ 500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)                            |
| Aspiration hazard  | : Not classified   |
| <b>propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)</b> |  |
| Viscosity, kinematic   | 2.658 mm <sup>2</sup> /s   |

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Not classified

| <b>Phosphoric acid (7664-38-2)</b> |  |
|------------------------------------|--|
| LC50 - Fish [1]                    | 75.1 mg/l Source: ECHA   |
| EC50 - Crustacea [1]               | > 100 mg/l Test organisms (species): Daphnia magna   |
| EC50 - Other aquatic organisms [1] | > 100 mg/l waterflea   |
| EC50 - Other aquatic organisms [2] | > 100 mg/l   |
| EC50 72h - Algae [1]               | > 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)  |
| <b>Oxalic acid (144-62-7)</b>      |  |
| LC50 - Fish [1]                    | 4000 mg/l  |
| EC50 - Crustacea [1]               | 162.2 mg/l Test organisms (species): Daphnia magna   |
| EC50 - Other aquatic organisms [1] | 162.2 mg/l waterflea   |
| EC50 72h - Algae [1]               | 19.83 – 21.35 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| EC50 72h - Algae [2]               | 18.39 – 19.92 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Isotridecanol, ethoxylated (69011-36-5) |  |
|---|--|
| LC50 - Fish [1]                         | > 1 mg/l   |
| EC50 - Crustacea [1]                    | 1.5 mg/l Test organisms (species): Daphnia magna |
| EC50 - Other aquatic organisms [1]      | > 1 mg/l waterflea                               |
| EC50 - Other aquatic organisms [2]      | > 1 mg/l   |
| EC50 96h - Algae [1]                    | 11.5 mg/l Source: EPISUITE v4.1                  |

| propan-2-ol; isopropyl alcohol; isopropanol (67-63-0) |  |
|---|--|
| LC50 - Fish [1]                                       | 10000 mg/l Test organisms (species): Pimephales promelas |
| LC50 - Fish [2]                                       | 9640 mg/l Test organisms (species): Pimephales promelas  |
| EC50 - Other aquatic organisms [1]                    | 13299 mg/l waterflea                                     |
| EC50 - Other aquatic organisms [2]                    | > 1000 mg/l  |

### 12.2. Persistence and degradability

| HG limescale remover concentrate |   |
|----------------------------------|---|
| Persistence and degradability    | The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. |

### 12.3. Bioaccumulative potential

| Phosphoric acid (7664-38-2)                           |       |
|---|-------|
| Partition coefficient n-octanol/water (Log Pow)       | -0.77 |
| Oxalic acid (144-62-7)                                |       |
| Partition coefficient n-octanol/water (Log Pow)       | -0.81 |
| propan-2-ol; isopropyl alcohol; isopropanol (67-63-0) |       |
| Partition coefficient n-octanol/water (Log Pow)       | 0.05  |

### 12.4. Mobility in soil

| Isotridecanol, ethoxylated (69011-36-5) |                             |
|---|-----------------------------|
| Mobility in soil                        | 111.3 Source: EPISUITE v4.1 |

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878






### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Dispose of in accordance with relevant local regulations.
- Ecology - waste materials : Avoid release to the environment.

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

| ADR   | IMDG   | IATA   | ADN  | RID  |
|---|--|--|--|--|
| <b>14.1. UN number or ID number</b>   |  |  |  |  |
| UN 3265   | UN 3265  | UN 3265  | UN 3265  | UN 3265  |
| <b>14.2. UN proper shipping name</b>  |  |  |  |  |
| CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (MIXTURE CONTAINS : Phosphoric acid)                      | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (MIXTURE CONTAINS : Phosphoric acid)                 | Corrosive liquid, acidic, organic, n.o.s. (MIXTURE CONTAINS : Phosphoric acid)                 | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (MIXTURE CONTAINS : Phosphoric acid)                 | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (MIXTURE CONTAINS : Phosphoric acid)                 |
| <b>Transport document description</b>   |  |  |  |  |
| UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (MIXTURE CONTAINS : Phosphoric acid), 8, III, (E) | UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (MIXTURE CONTAINS : Phosphoric acid), 8, III | UN 3265 Corrosive liquid, acidic, organic, n.o.s. (MIXTURE CONTAINS : Phosphoric acid), 8, III | UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (MIXTURE CONTAINS : Phosphoric acid), 8, III | UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (MIXTURE CONTAINS : Phosphoric acid), 8, III |
| <b>14.3. Transport hazard class(es)</b>   |  |  |  |  |
| 8   | 8  | 8  | 8  | 8  |
|                  |             |             |           |           |
| <b>14.4. Packing group</b>  |  |  |  |  |
| III   | III  | III  | III  | III  |
| <b>14.5. Environmental hazards</b>  |  |  |  |  |
| Dangerous for the environment: No   | Dangerous for the environment: No<br>Marine pollutant: No                                      | Dangerous for the environment: No  | Dangerous for the environment: No  | Dangerous for the environment: No  |
| No supplementary information available  |  |  |  |  |

#### 14.6. Special precautions for user

##### Overland transport

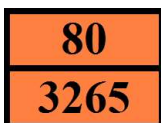
- Classification code (ADR) : C3  
Special provisions (ADR) : 274  
Limited quantities (ADR) : 5I  
Excepted quantities (ADR) : E1  
Packing instructions (ADR) : P001, IBC03, LP01, R001  
Mixed packing provisions (ADR) : MP19  
Portable tank and bulk container instructions (ADR) : T7  
Portable tank and bulk container special provisions (ADR) : TP1, TP28  
Tank code (ADR) : L4BN  
Vehicle for tank carriage : AT

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Transport category (ADR) : 3  
Special provisions for carriage - Packages (ADR) : V12  
Hazard identification number (Kemler No.) : 80  
Orange plates :



Tunnel restriction code (ADR) : E  
EAC code : 2X

### Transport by sea

Special provisions (IMDG) : 223, 274  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P001, LP01  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T7  
Tank special provisions (IMDG) : TP1, TP28  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-B  
Stowage category (IMDG) : A  
Stowage and handling (IMDG) : SW2  
Segregation (IMDG) : SGG1, SG36, SG49  
Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

### Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y841  
PCA limited quantity max net quantity (IATA) : 1L  
PCA packing instructions (IATA) : 852  
PCA max net quantity (IATA) : 5L  
CAO packing instructions (IATA) : 856  
CAO max net quantity (IATA) : 60L  
Special provisions (IATA) : A3, A803  
ERG code (IATA) : 8L

### Inland waterway transport

Classification code (ADN) : C3  
Special provisions (ADN) : 274  
Limited quantities (ADN) : 5 L  
Excepted quantities (ADN) : E1  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : C3  
Special provisions (RID) : 274  
Limited quantities (RID) : 5L  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P001, IBC03, LP01, R001  
Mixed packing provisions (RID) : MP19  
Portable tank and bulk container instructions (RID) : T7  
Portable tank and bulk container special provisions (RID) : TP1, TP28  
Tank codes for RID tanks (RID) : L4BN  
Transport category (RID) : 3  
Special provisions for carriage – Packages (RID) : W12  
Colis express (express parcels) (RID) : CE8  
Hazard identification number (RID) : 80

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

| EU restriction list (REACH Annex XVII) |   |  |
|--|---|--|
| Reference code                         | Applicable on   | Entry title or description   |
| 3(a)                                   | propan-2-ol; isopropyl alcohol; isopropanol   | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F   |
| 3(b)                                   | HG limescale remover concentrate ;<br>Isotridecanol, ethoxylated ;<br>propan-2-ol; isopropyl alcohol; isopropanol | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10  |
| 40.                                    | propan-2-ol; isopropyl alcohol; isopropanol   | Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. |

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### Detergent Regulation (648/2004)

| Labelling of contents |     |
|-----------------------|-----|
| Component             | %   |
| non-ionic surfactants | <5% |
| perfumes              |     |

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

#### Abbreviations and acronyms:

|         |   |
|---------|---|
| ADN     | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR     | European Agreement concerning the International Carriage of Dangerous Goods by Road             |
| ATE     | Acute Toxicity Estimate   |
| BCF     | Bioconcentration factor   |
| BLV     | Biological limit value  |
| BOD     | Biochemical oxygen demand (BOD)   |
| COD     | Chemical oxygen demand (COD)  |
| DMEL    | Derived Minimal Effect level  |
| DNEL    | Derived-No Effect Level   |
| EC-No.  | European Community number   |
| EC50    | Median effective concentration  |
| EN      | European Standard   |
| IARC    | International Agency for Research on Cancer   |
| IATA    | International Air Transport Association   |
| IMDG    | International Maritime Dangerous Goods  |
| LC50    | Median lethal concentration   |
| LD50    | Median lethal dose  |
| LOAEL   | Lowest Observed Adverse Effect Level  |
| NOAEC   | No-Observed Adverse Effect Concentration  |
| NOAEL   | No-Observed Adverse Effect Level  |
| NOEC    | No-Observed Effect Concentration  |
| OECD    | Organisation for Economic Co-operation and Development  |
| OEL     | Occupational Exposure Limit   |
| PBT     | Persistent Bioaccumulative Toxic  |
| PNEC    | Predicted No-Effect Concentration   |
| RID     | Regulations concerning the International Carriage of Dangerous Goods by Rail                    |
| SDS     | Safety Data Sheet   |
| STP     | Sewage treatment plant  |
| ThOD    | Theoretical oxygen demand (ThOD)  |
| TLM     | Median Tolerance Limit  |
| VOC     | Volatile Organic Compounds  |
| CAS-No. | Chemical Abstract Service number  |
| N.O.S.  | Not Otherwise Specified   |
| vPvB    | Very Persistent and Very Bioaccumulative  |
| ED      | Endocrine disrupting properties   |

# HG limescale remover concentrate

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Other information

: **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

### Full text of H- and EUH-statements:

|                       |  |
|-----------------------|--|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4                                    |
| Acute Tox. 4 (Oral)   | Acute toxicity (oral), Category 4                                      |
| Eye Dam. 1            | Serious eye damage/eye irritation, Category 1                          |
| Eye Irrit. 2          | Serious eye damage/eye irritation, Category 2                          |
| Flam. Liq. 2          | Flammable liquids, Category 2  |
| H225                  | Highly flammable liquid and vapour.                                    |
| H290                  | May be corrosive to metals.  |
| H302                  | Harmful if swallowed.  |
| H312                  | Harmful in contact with skin.  |
| H314                  | Causes severe skin burns and eye damage.                               |
| H315                  | Causes skin irritation.  |
| H318                  | Causes serious eye damage.   |
| H319                  | Causes serious eye irritation.   |
| H336                  | May cause drowsiness or dizziness.                                     |
| Met. Corr. 1          | Corrosive to metals, Category 1  |
| Skin Corr. 1B         | Skin corrosion/irritation, Category 1, Sub-Category 1B                 |
| Skin Irrit. 2         | Skin corrosion/irritation, Category 2                                  |
| STOT SE 3             | Specific target organ toxicity – Single exposure, Category 3, Narcosis |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.