# SAFETY DATA SHEET
(in accordance with Regulation (EU) 2015/830)

# ASTRAL descaler. Gel special for water line



## SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING.

**1.1 Product identifier.**

Product Name: ASTRAL descaler. Gel special for water line

**1.2 Relevant identified uses of the mixture and uses advised against.**

De-scaler

**Uses advised against:**
Uses other than those recommended.

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

Company: **FLUIDRA COMMERCIAL, S.A.U.**
Address: Avda. Francesc Macià, 60, 20ª planta
City: 08208 Sabadell
Province: (Barcelona) Spain
Telephone: Tel: +34 93 724 39 00
Fax: Fax: +34 93 724 29 93
E-mail: fds@inquide.com
Web: www.astralpool.com

**1.4 Emergency telephone number:**
Anti poisoning centre:

ITALY (Rome): 06/305 43 43
ITALY (Milan): 02/66 10 10 29

SPAIN: +34 91 562 04 20

FRANCE (Paris): 01 40 05 48 48
FRANCE (Tolousse): 05 61 77 74 47
FRANCE (Marseille): 04 91 75 25 25

PORTUGAL: 808 250 143

## SECTION 2: HAZARDS IDENTIFICATION.

**2.1 Classification of the mixture.**
In accordance with Regulation (EU) No 1272/2008:
Eye Dam. 1 : Causes serious eye damage.
Skin Corr. 1A : Causes severe skin burns and eye damage.
STOT SE 3 : May cause respiratory irritation.

**2.2 Label elements.**
**Labelling in accordance with Regulation (EU) No 1272/2008:**
Pictograms:

Signal Word:
**Danger**
H statements:

| | |
|---|---|
| H314 | Causes severe skin burns and eye damage. |
| H335 | May cause respiratory irritation. |

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P statements:

| | |
|---|---|
| P101 | If medical advice is needed, have product container or label at hand. |
| P102 | Keep out of reach of children. |
| P103 | Read label before use. |
| P264 | Wash hands thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P501 | Dispose of contents/container in accordance with applicable regulations. |

EUH statements:

| | |
|---|---|
| EUH206 | Warning! Do not use together with other products. May release dangerous gases (chlorine). |

Contains:
hydrochloric acid
Amines, tallow alkyl, ethoxylated

**2.3 Other hazards.**
In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

**3.1 Substances.**
Not Applicable.

**3.2 Mixtures.**
Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

| Identifiers | Name | Concentrate | (*)Classification - Regulation (EC) No 1272/2008 | |
|---|---|---|---|---|
| | | | Classification | specific concentration limit |
| Index No: 017-002-01-X<br>EC No: 231-595-7<br>Registration No: 01-2119484862-27-XXXX | hydrochloric acid | 10 - 25 % | Skin Corr. 1B, H314 - STOT SE 3, H335 | Skin Corr. 1B, H314: C ≥ 25 %<br>Skin Irrit. 2, H315: 10 % ≤ C < 25 %<br>Eye Irrit. 2, H319: 10 % ≤ C < 25 %<br>STOT SE 3, H335: C ≥ 10 % |
| CAS No: 61791-26-2<br>EC No: 500-153-8 | Amines, tallow alkyl, ethoxylated | 1 - 3 % | Acute Tox. 4, H302 - Aquatic Acute 1, H400 - Skin Corr. 1B, H314 | - |
| Index No: 603-117-00-0<br>CAS No: 67-63-0<br>EC No: 200-661-7<br>Registration No: 01-2119457558-25-XXXX | [1] isopropanol,isopropyl alcohol,propan-2-ol | 0 - 10 % | Eye Irrit. 2, H319 - Flam. Liq. 2, H225 - STOT SE 3, H336 | - |

(*) *The complete text of the H phrases is given in section 16 of this Safety Data Sheet.*
*[1] Substance with a Community workplace exposure limit (see section 8.1).*

## SECTION 4: FIRST AID MEASURES.

**4.1 Description of first aid measures.**

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In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

**Inhalation.**
Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance.

**Eye contact**.
Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

**Skin contact.**
Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. **NEVER** use solvents or thinners.

**Ingestion.**
If accidentally ingested, seek immediate medical attention. Keep calm. **NEVER** induce vomiting.

**4.2 Most important symptoms and effects, both acute and delayed.**
Corrosive Product, contact with eyes or skin can cause burns; ingestion or inhalation can cause internal damage, if this occurs immediate medical assistance is required.

**4.3 Indication of any immediate medical attention and special treatment needed.**
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

## SECTION 5: FIREFIGHTING MEASURES.

The product does not present any particular risk in case of fire.

**5.1 Extinguishing media.**
**Recommended extinguishing methods.**
Extinguisher powder or $CO_2$. In case of more serious fires, also alcohol-resistant foam and water spray. Do not use a direct stream of water to extinguish.

**5.2 Special hazards arising from the mixture.**
**Special risks.**
Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

**5.3 Advice for firefighters.**
Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.
**Fire protection equipment.**
According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

## SECTION 6: ACCIDENTAL RELEASE MEASURES.

**6.1 Personal precautions, protective equipment and emergency procedures.**
For exposure control and individual protection measures, see section 8.

**6.2 Environmental precautions.**
Prevent the contamination of drains, surface or subterranean waters, and the ground.

**6.3 Methods and material for containment and cleaning up.**
Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate de-contaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

**6.4 Reference to other sections.**
For exposure control and individual protection measures, see section 8.

-Continued *on next page.*-

For later elimination of waste, follow the recommendations under section 13.

## SECTION 7: HANDLING AND STORAGE.

**7.1 Precautions for safe handling.**
For personal protection, see section 8. Never use pressure to empty the containers. They are not pressure-resistant containers.
In the application area, smoking, eating, and drinking must be prohibited.
Follow legislation on occupational health and safety.
Keep the product in containers made of a material identical to the original.

**7.2 Conditions for safe storage, including any incompatibilities.**
Store according to local legislation. Observe indications on the label. Store the containers between 5 and 35º C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.
The product is not affected by Directive 2012/18/EU (SEVESO III).
**7.3 Specific end use(s).**
None in particular.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

**8.1 Control parameters.**

Work exposure limit for:

| Name | CAS No. | Country | Limit value | ppm | mg/m³ |
|---|---|---|---|---|---|
| isopropanol,isopropyl alcohol,propan-2-ol | 67-63-0 | United Kingdom [1] | **Eight hours** | 400 | 999 |
| | | | **Short term** | 500 | 1250 |

*[1] According Limit Value (IOELV) list in 2nd Indicative Occupational Exposure adobted by Health and Safety Executive.*
The product does NOT contain substances with Biological Limit Values.
Concentration levels DNEL/DMEL:

| Name | DNEL/DMEL | Type | Value |
|---|---|---|---|
| isopropanol,isopropyl alcohol,propan-2-ol<br>N. CAS: 67-63-0<br>N. CE: 200-661-7 | DNEL (Workers) | Inhalation, Long-term, Systemic effects | 500 (mg/m³) |
| | DNEL (General population) | Inhalation, Long-term, Systemic effects | 89 (mg/m³) |
| | DNEL (Workers) | Dermal, Long-term, Systemic effects | 888 (mg/kg bw/day) |
| | DNEL (General population) | Dermal, Long-term, Systemic effects | 319 (mg/kg bw/day) |
| | DNEL (General population) | Oral, Long-term, Systemic effects | 26 (mg/kg bw/day) |

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
Concentration levels PNEC:

| Name | Details | Value |
|---|---|---|
| isopropanol,isopropyl alcohol,propan-2-ol<br>N. CAS: 67-63-0<br>N. CE: 200-661-7 | aqua (freshwater) | 140,9 (mg/L) |
| | aqua (marine water) | 140,9 (mg/L) |
| | aqua (intermittent releases) | 140,9 (mg/L) |
| | sediment (freshwater) | 552 (mg/kg sediment dw) |
| | sediment (marine water) | 552 (mg/kg sediment dw) |
| | Soil | 28 (mg/kg soil dw) |

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| | | |
|---|---|---|
| | PNEC STP | 2251 (mg/L) |
| | PNEC oral (Hazard for predators) | 160 (mg/kg food) |

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

**8.2 Exposure controls.**

**Measures of a technical nature:**
Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

| | | | |
|---|---|---|---|
| **Concentration:** | **100 %** | | |
| **Uses:** | **De-scaler** | | |
| **Breathing protection:** | | | |
| If the recommended technical measures are observed, no individual protection equipment is necessary. | | | |
| **Hand protection:** | | | |
| PPE: | Non-disposable protective gloves against chemicals.  | | |
| Characteristics: | «CE» marking, category III. Check the list of chemicals for which the glove has been tested. | | |
| CEN standards: | EN 374-1, En 374-2, EN 374-3, EN 420 | | |
| Maintenance: | A schedule for the periodical replacement of gloves should be established in order to guarantee their replacement before pollutants permeate them. The use of contaminated gloves could be more dangerous than not using gloves, since the pollutant can gradually accumulate in the glove's material. | | |
| Observations: | They are to be replaced whenever tears, cracks or deformations are observed or when exterior dirt could reduce their strength. | | |
| Material: | PVC (polyvinyl chloride) | Breakthrough time (min.): > 480 | Material thickness (mm): 0,35 |
| **Eye protection:** | | | |
| PPE: | Protective goggles with built-in frame.  | | |
| Characteristics: | «CE» marking, category II. Eye protector with built-in frame for protection against dust, smoke, fog and vapour. | | |
| CEN standards: | EN 165, EN 166, EN 167, EN 168 | | |
| Maintenance: | Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions. | | |
| Observations: | Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc. | | |
| **Skin protection:** | | | |
| PPE: | Chemical protective clothing  | | |
| Characteristics: | «CE» marking, category III. Clothing should fit properly. The level of protection must be set according to a test parameter called BT (Breakthrough Time), which indicates how long it takes for the chemical to pass through the material. | | |
| CEN standards: | EN 464,EN 340, EN 943-1, EN 943-2, EN ISO 6529, EN ISO 6530, EN 13034 | | |
| Maintenance: | In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer. | | |
| Observations: | The protective clothing's design should facilitate correct positioning, staying in place without moving for the period of use expected, bearing in mind environmental factors as well as any movement or position the user might adopt while carrying out the activity. | | |
| PPE: | Anti-static safety footwear against chemicals.  | | |
| Characteristics: | «CE» marking, category III. Check the list of chemicals against which the footwear is resistant. | | |
| CEN standards: | EN ISO 13287, EN 13832-1, EN 13832-2, EN 13832-3, EN ISO 20344, EN ISO 20345 | | |
| Maintenance: | For correct maintenance of this kind of safety footwear, it is necessary to observe the instructions specified by the manufacturer. The footwear should be replaced as soon as any sign of damage is observed. | | |
| Observations: | The footwear should be cleaned regularly and dried when damp, although it should not be placed too close to a source of heat in order to avoid any sharp changes in temperature. | | |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

**9.1 Information on basic physical and chemical properties.**
Appearance:Gelatinous liquid

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Colour: Pale pink
Odour:Characteristic (spicy)
Odour threshold:N.A./N.A.
pH:0,5 (5%)
Melting point:N.A./N.A.
Boiling Point: >100 ºC
Flash point: > 60 ºC
Evaporation rate: N.A./N.A.
Inflammability (solid, gas): N.A./N.A.
Lower Explosive Limit: N.A./N.A.
Upper Explosive Limit: N.A./N.A.
Vapour pressure: N.A./N.A.
Vapour density:N.A./N.A.
Relative density:1.05 - 1.09 g/cm$^3$
Solubility:N.A./N.A.
Liposolubility: Etanol, éter, benceno, acetona
Hydrosolubility: 100 %
Partition coefficient (n-octanol/water): N.A./N.A.
Auto-ignition temperature: N.A./N.A.
Decomposition temperature: N.A./N.A.
Viscosity: N.A./N.A.
Explosive properties: N.A./N.A.
Oxidizing properties: No aplicable

N.A./N.A.= Not Available/Not Applicable due to the nature of the product

**9.2 Other information.**
Pour point: N.A./N.A.
Blink: N.A./N.A.
Kinematic viscosity: N.A./N.A.
N.A./N.A.= Not Available/Not Applicable due to the nature of the product

## SECTION 10: STABILITY AND REACTIVITY.

**10.1 Reactivity.**
The product does not present hazards by their reactivity.

**10.2 Chemical stability.**
Stable under the recommended handling and storage conditions (see section 7).

**10.3 Possibility of hazardous reactions.**
Warning! Do not use together with other products. May release dangerous gases (chlorine).

**10.4 Conditions to avoid.**
Avoid any improper handling.

**10.5 Incompatible materials.**
Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

**10.6 Hazardous decomposition products.**
No decomposition if used for the intended uses.

## SECTION 11: TOXICOLOGICAL INFORMATION.

IRRITANT PREPARATION. The inhalation of spray mist or suspended particulates can irritate the respiratory tract. It can also cause serious respiratory difficulties, central nervous system disorders, and in extreme cases, unconsciousness.

**11.1 Information on toxicological effects.**
Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

**Toxicological information about the substances present in the composition.**

| Name | Acute toxicity | | | |
|---|---|---|---|---|
| | Type | Test | Kind | Value |

-Continued *on next page.*-

| | | | | |
|---|---|---|---|---|
| hydrochloric acid<br><br>CAS No: EC No: 231-595-7 | Oral | LD50 | Rat | 700 mg/kg |
| | Dermal | LD50 | Rabbit | > 5010 mg/kg |
| | Inhalation | LC50 | Rat | 4.6 mg/l |
| Amines, tallow alkyl, ethoxylated<br><br>CAS No: 61791-26-2 EC No: 500-153-8 | Oral | LC50 | Rat | 2000 mg/kg |
| | Dermal | | | |
| | Inhalation | | | |
| isopropanol,isopropyl alcohol,propan-2-ol<br><br>CAS No: 67-63-0 EC No: 200-661-7 | Oral | LD50<br>LD50<br><br>[1] FURTHER EXPERIENCE WITH THE RANGE FINDING TEST IN THE INDUSTRIAL TOXICOLOGY LABORATORY, J Ind Hyg Toxicol 30(1):63-68<br>[2] FURTHER EXPERIENCE WITH THE RANGE FINDING TEST IN THE INDUSTRIAL TOXICOLOGY LABORATORY, J Ind Hyg Toxicol 30(1):63-68 | Rat<br>Rat | 5840 mg/kg bw [1]<br>5840 mg/kg bw [2] |
| | Dermal | LD50<br><br>[1] OCDE 402 | Rabbit | 13900 mg/kg [1] |
| | Inhalation | LC50<br><br>[1] OCDE 403 | Rat | > 25000 mg/kg [1] |

a) acute toxicity;
Not conclusive data for classification.

Acute Toxicity Estimate (ATE):
Mixtures:
ATE (Oral) = 26.043 mg/kg

b) skin corrosion/irritation;
Product classified:
Skin Corrosive, Category 1A: Causes severe skin burns and eye damage.

c) serious eye damage/irritation;
Product classified:
Serious eye damage, Category 1: Causes serious eye damage.

d) respiratory or skin sensitisation;
Not conclusive data for classification.

e) germ cell mutagenicity;
Not conclusive data for classification.

f) carcinogenicity;
Not conclusive data for classification.

g) reproductive toxicity;
Not conclusive data for classification.

h) STOT-single exposure;
Product classified:
Specific target organ toxicity following a single exposure, Category 3:

i) STOT-repeated exposure;
Not conclusive data for classification.

j) aspiration hazard;
Not conclusive data for classification.

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## SECTION 12: ECOLOGICAL INFORMATION.

**12.1 Toxicity.**

| Name | Ecotoxicity | | | |
|---|---|---|---|---|
| | Type | Test | Kind | Value |
| hydrochloric acid<br>CAS No: EC No: 231-595-7 | Fish | LC50 | Fish | 282 mg/l (96 h) |
| | Aquatic invertebrates | EC50 | Daphnia | 56 mg/l (72 h) |
| | Aquatic plants | | | |
| Amines, tallow alkyl, ethoxylated<br>CAS No: 61791-26-2 EC No: 500-153-8 | Fish | LC50 | Fish | 0.99 mg/l (96 h) |
| | Aquatic invertebrates | | | |
| | Aquatic plants | | | |
| isopropanol,isopropyl alcohol,propan-2-ol<br>CAS No: 67-63-0 EC No: 200-661-7 | Fish | LC50<br>LC50 | Fish<br>Pimephales promelas | 9640 mg/l (96 h) [1]<br>10000 mg/l (96 h) [2]<br><br>[1] Brooke, L.T., D.J. Call, D.L. Geiger, and C.E. Northcott 1984. Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas), Vol. 1. Center for Lake Superior Environmental Stud., Univ.of Wisconsin-Superior, Superior, WI :414<br>[2] The 96 hour LC50 method is described by the US Environmental Protection Agency Committee on Methods for Toxicity Tests with Aquatic Organisms 1975. |
| | Aquatic invertebrates | EC50<br>LC50 | Daphnia magna<br>Daphnia magna | 9714 mg/L (24 h) [1]<br>>10000 mg/l (24 h) [2]<br><br>[1] Not GLP, no guideline followed, although it is similar to the most recent OECD 202 with some deviations, which did not affect results. It contains all the information necessary for the evaluation.<br>[2] Not GLP, no guideline followed, although it is similar to the most recent OECD 202 with some deviations, which did not affect results. It contains all the information necessary for the evaluation. |
| | Aquatic plants | | | |

**12.2 Persistence and degradability.**
No information is available about persistence and degradability of the product.

**12.3 Bioaccumulative potencial.**
**Information about the bioaccumulation of the substances present.**

| Name | Bioaccumulation | | | |
|---|---|---|---|---|
| | Log Pow | BCF | NOECs | Level |
| isopropanol,isopropyl alcohol,propan-2-ol<br>N. CAS: 67-63-0 EC No: 200-661-7 | 0,05 | - | - | Very low |

**12.4 Mobility in soil.**
No information is available about the mobility in soil.

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The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

**12.5 Results of PBT and vPvB assessment.**
No information is available about the results of PBT and vPvB assessment of the product.

**12.6 Other adverse effects.**
No information is available about other adverse effects for the environment.

## SECTION 13 DISPOSAL CONSIDERATIONS.

**13.1 Waste treatment methods.**
Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
Follow the provisions of Directive 2008/98/EC regarding waste management.

## SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.
**Land:** Transport by road: ADR, Transport by rail: RID.
Transport documentation: Consignment note and written instructions
**Sea:** Transport by ship: IMDG.
Transport documentation: Bill of lading
**Air:** Transport by plane: ICAO/IATA.
Transport document: Airway bill.

**14.1 UN number.**
UN No: UN1760

**14.2 UN proper shipping name.**
Description:
ADR: UN 1760, CORROSIVE LIQUID, N.O.S. (CONTAINS HYDROCHLORIC ACID / AMINES, TALLOW ALKYL, ETHOXYLATED), 8, PG II, (E)
IMDG: UN 1760, CORROSIVE LIQUID, N.O.S. (CONTAINS HYDROCHLORIC ACID / AMINES, TALLOW ALKYL, ETHOXYLATED), 8, PG II
ICAO: UN 1760, CORROSIVE LIQUID, N.O.S. (CONTAINS HYDROCHLORIC ACID / AMINES, TALLOW ALKYL, ETHOXYLATED), 8, PG II

**14.3 Transport hazard class(es).**
Class(es): 8

**14.4 Packing group.**
Packing group: II

**14.5 Environmental hazards.**
Marine pollutant: No

**14.6 Special precautions for user.**
Labels: 8


Hazard number: 80
ADR LQ: 1 L
IMDG LQ: 1 L
ICAO LQ: 0,5 L

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Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.
Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A,S-B
Proceed in accordance with point 6.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.**
The product is not transported in bulk.

## SECTION 15: REGULATORY INFORMATION.

**15.1 Safety, health and environmental regulations/legislation specific for the mixture.**
The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

The product is not affected by Directive 2012/18/EU (SEVESO III).
The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.
The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

**15.2 Chemical safety assessment.**
There has been no evaluation a chemical safety assessment of the product.

## SECTION 16: OTHER INFORMATION.

Complete text of the H phrases that appear in section 3:

| | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H400 | Very toxic to aquatic life. |

Classification codes:

Acute Tox. 4 [Oral] : Acute toxicity (Oral), Category 4
Aquatic Acute 1 : Acute toxicity to the aquatic environment, Category 1
Eye Dam. 1 : Serious eye damage, Category 1
Eye Irrit. 2 : Eye irritation, Category 2
Flam. Liq. 2 : Flammable liquid, Category 2
Skin Corr. 1A : Skin Corrosive, Category 1A
Skin Corr. 1B : Skin Corrosive, Category 1B
STOT SE 3 : Specific target organ toxicity following a single exposure, Category 3

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Information on the TSCA Inventory (Toxic Substances Control Act) USA:

| CAS No | Name | State |
|---|---|---|
| | hydrochloric acid | |
| 61791-26-2 | Amines, tallow alkyl, ethoxylated | Registered |
| 67-63-0 | isopropanol,isopropyl alcohol,propan-2-ol | Registered |

Abbreviations and acronyms used:

-Continued *on next page.*-

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
BCF: Bioconcentration factor.
CEN: European Committee for Standardization.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
EC50: Half maximal effective concentration.
PPE: Personal protection equipment.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organization.
IMDG: International Maritime Code for Dangerous Goods.
LC50: Lethal concentration, 50%.
LD50: Lethal dose, 50%.
Log Pow: Logarithm of the partition octanol-water.
NOEC: No observed effect concentration.
PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

Key literature references and sources for data:
http://eur-lex.europa.eu/homepage.html
http://echa.europa.eu/
Regulation (EU) 2015/830.
Regulation (EC) No 1907/2006.
Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

-End *of safety data sheet..*-