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

### 1.1. Product identifier

| | |
|---|---|
| Product name: | 3in1 Descaler, degreaser, sanitiser. |
| Model: | CPP250DW |
| Code: | 35602754 |
| EAN: | 8059019071565 |
| UFI: | PF30-602K-000Y-4WX6 |

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

Intended use: Descaler, degreaser, sanitiser for washing machines and dishwasher.

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

| | |
|---|---|
| Registered name | Candy Hoover Group S.r.l.<br>Via Comolli, 16 - 20861 Brugherio (MB) - Italy |
| Telephone number | +39 039 20861 |
| e-mail address of the competent person responsible for the Safety Data Sheet | sds@dgsasrl.it |

### 1.4. Emergency telephone number

For urgent inquiries refer to: ENGLAND, SCOTLAND (NHS 24) WALES (NHS Direct Wales) - For medical advice contact 111

## SECTION 2. Hazards identification

### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

| | | |
|---|---|---|
| Eye irritation, category 2 | H319 | Causes serious eye irritation. |

### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.
Hazard pictograms:

| | |
|---|---|
| Signal words: | Warning |
| Hazard statements: | |
| H319 | Causes serious eye irritation. |
| Precautionary statements: | |
| P264 | Wash hands thoroughly after handling. |
| P102 | Keep out of reach of children. |
| P101 | If medical advice is needed, have product container or label at hand. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337+P313 | If eye irritation persists: Get medical advice / attention. |

Ingredients: non -ionic surfactants <5%.

### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.
The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

## SECTION 3. Composition/information on ingredients

**3.2. Mixtures**

Contains:

| Identification | | x = Conc. % | Classification (EC) 1272/2008 (CLP) |
|---|---|---|---|
| **Citric acid** | | | |
| INDEX | 607-750-00-3 | 19,0 ≤ x < 20 | Eye Irrit. 2 H319, STOT SE 3 H335 |
| CE | 201-069-1 | | |
| CAS | 77-92-9 | | |
| **2-propylheptanol ethoxylated, propoxylated** | | | |
| INDEX | - | 4,4 ≤ x < 4,6 | Eye Irrit. 2 H319 |
| CE | 605-450-7 | | |
| CAS | 166736-08-9 | | |
| Reg. REACH | 02-2119630747-33 | | |
| **1,2-PROPANEDIOL** | | | |
| INDEX | - | 2,98 ≤ x < 3,05 | |
| CE | 200-338-0 | | |
| CA | S57-55-6 | | |
| **sodium (xylenes and 4-ethylbenzene)sulfonate** | | | |
| INDEX | - | 1,67 ≤ x < 1,72 | Eye Irrit. 2 H319 |
| CE | 215-090-9 | | |
| CAS | 1300-72-7 | | |
| Reg. REACH | 01-2119513350-56 | | |
| **diphenyl ether** | | | |
| INDEX | - | 0,00099 ≤ x < 0,00191 | Eye Irrit. 2 H319, Aquatic Acute 1 H400 M=1, Aquatic Chronic 3 H412 |
| CE | 202-981-2 | | |
| CAS | 101-84-8 | | |
| Reg. REACH | 01-2119472545-33 | | |

The full wording of hazard (H) phrases is given in section 16 of the sheet.

## SECTION 4. First aid measures

**4.1. Description of first aid measures**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

## SECTION 5. Firefighting measures

**5.1. Extinguishing media**

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

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

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

**5.3. Advice for firefighters**

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures

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

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

≠ 2-propylheptanol éthoxylates, propoxylated

Suitable materials: carbon steel, high density polyethylene (PEHD), low density polyethylene (PELD), stainless steel 1.4306 (V2A), stainless steel 1.4401 (V4), stainless steel 1.4439, stainless steel 1.4539, stainless steel 1.4541, stainless steel 1.4571, kiln paint RDL 50, enamelled, tin (tin)
Storage temperature: < 70 °C

≠ sodium (xylenes and 4-ethylbenzene)sulfonate

Temperatures between 0 °C and 40 °C

### 7.3. Specific end use(s)

Descaler, degreaser, sanitiser for washing machines and dishwasher.

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

| | | |
|---|---|---|
| DEU | Deutschland | Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56 |
| FRA | France | Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| EU | OEL EU | Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC. |
| | TLV-ACGIH | ACGIH 2021 |

≠ CITRIC ACID

| Threshold Limit Value | | | | | | |
|---|---|---|---|---|---|---|
| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 2 | | 4 (C) | | INHAL |

≠ 1,2-PROPANEDIOL

| Threshold Limit Value | | | | | | |
|---|---|---|---|---|---|---|
| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
| | | mg/m3 | ppm | mg/m3 | ppm | |
| WEL | GBR | 10 | | | | Particulates |

≠ sodium (xylenes and 4-ethylbenzene)sulfonate

| Predicted no-effect concentration - PNEC | | |
|---|---|---|
| Normal value in fresh water | 0,23 | mg/l |
| Normal value for water, intermittent release | 2,3 | mg/l |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Normal value of STP microorganisms | | | | 100 | mg/l | | | |
| Health - Derived no-effect level - DNEL / DMEL | | | | | | | | |
| | Effects on consumers | | | | Effects on workers | | | |
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | | 3,8 mg/kg bw/d | | | | |
| Inhalation | | | | 13,3 mg/m3 | | | | 53,6 mg/m3 |
| Skin | | | 0,048 mg/kg bw/d | 3,8 mg/kg bw/d | | | 0,096 mg/kg bw/d | 7,6 mg/kg bw/d |

≠ diphenyl ether

| Threshold Limit Value | | | | | | | |
|---|---|---|---|---|---|---|---|
| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations | |
| | | mg/m3 | ppm | mg/m3 | ppm | | |
| AGW | DEU | 7,1 | 1 | 7,1 | 1 | INHAL | aerosol e vapori |
| MAK | DEU | 7,1 | 1 | 7,1 | 1 | | frazione e vapori |
| VLEP | FRA | 7 | 1 | | | | |
| WEL | GBR | 7,1 | 1 | | | | |
| OEL | EU | 7 | 1 | 14 | 2 | | |
| TLV-ACGIH | | 1 | 2 | | | | |

Legend:
(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

**8.2. Exposure controls**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.
Provide an emergency shower with face and eye wash station.

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

≠ 2-propylheptanol ethoxylated, propoxylated
Suitable materials also for direct and prolonged contact (Recommendations: protection factor 6, corresponding to >480 minutes of permeation time according to EN 374):nitrilcaucciu (NBR) - 0,4 mm thickness.

## SECTION 9. Physical and chemical properties

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

| Properties | Value | Information |
|---|---|---|
| Appearance | liquid | |
| Colour | colourless | |
| Odour | Lemon | |
| Melting point / freezing point | not available | |
| Initial boiling point | not available | |
| Flammability | not available | |
| Lower explosive limit | not available | |
| Upper explosive limit | not available | |
| Flash point | > 60 °C | |
| Auto-ignition temperature | not available | |
| Decomposition temperature | not available | |
| pH | 2,2 - 2,4 | |
| Kinematic viscosity | not available | |
| Solubility | soluble in water | |
| Partition coefficient: n-octanol/water | not available | |
| Vapour pressure | 17,23 mmHg | |
| Density and/or relative density | 1,085 - 1,105 | |
| Relative vapour density | not available | |
| Particle characteristics | not applicable | |

### 9.2. Other information

9.2.1. Information with regard to physical hazard classes
Information not available
9.2.2. Other safety characteristics

| | |
|---|---|
| Total solids | 26,53 % |
| VOC (Directive 2010/75/EU) | 3,00 % |
| VOC (volatile carbon) | 1,42 % |

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

≠ 1,2-PROPANEDIOL
Hygroscopic. Stable in normal conditions of use and storage.
At high temperatures it tends to oxidate to form propionaldehyde and lactic and acetic acid.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

≠ 1,2-PROPANEDIOL
May react dangerously with acid chlorides, acid anhydrides, oxidising agents.

### 10.4. Conditions to avoid

None in particular. However, the usual precautions used for chemical products should be respected.

### 10.5. Incompatible materials

Information not available

### 10.6. Hazardous decomposition products

≠ 1,2-PROPANEDIOL
May develop carbon oxides.

## SECTION 11. Toxicological information

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

Metabolism, toxicokinetic, mechanism of action and other information
Information not available
Information on likely routes of exposure
Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Information not available
Interactive effects
Information not available

ACUTE TOXICITY

| | |
|---|---|
| ATE (Inhalation) of the mixture: | Not classified (no significant component) |
| ATE (Oral) of the mixture: | Not classified (no significant component) |
| ATE (Dermal) of the mixture: | Not classified (no significant component) |

≠ CITRIC ACID

| | |
|---|---|
| LD50 (Oral): | 3000 mg/kg Rat |

≠ 2-propylheptanol ethoxylated, propoxylated

| | |
|---|---|
| LD50 (Oral): | > 2000 mg/kg Metodo: OECD 423 |

≠ 1,2-PROPANEDIOL

| | |
|---|---|
| LD50 (Dermal): | 20800 mg/kg Rat |
| LD50 (Oral): | 20800 mg/kg Rat |

≠ sodium (xylenes and 4-ethylbenzene)sulfonate

| | |
|---|---|
| LD50 (Dermal): | > 2000 mg/kg |
| LD50 (Oral): | > 7200 mg/kg |
| LC50 (Inhalation vapours): | > 6,41 mg/l/4h |

≠ diphenyl ether

| | |
|---|---|
| LD50 (Oral): | 2830 mg/kg |

≠ 2-propylheptanol ethoxylated, propoxylated
Method: OECD 423
Species: rat
Exposure: oral
Results: LD50:> 2000 - 5000 mg/kg

≠ sodium (xylenes and 4-ethylbenzene)sulfonate
Reference: report of study (1965)
Reliability (Klimisch score): 2
Species: Rat (Sprague-Dawley Male/Female)
Exposure: oral
Results LD50: >= 7200 mg/kg
Method: equivalent or similar to OECD 403
Reliability (Klimisch score): 2
Species: Rat (Alibi, COX-SD Male/Female)
Exposure: inhalation (aerosol)
Results LC50: > 6.41 mg/l/232 min
Method: equivalent or similar to OECD 402
Reliability (Klimisch score): 2
Species: Rabbit
Exposure: dermal
Results LD50: > 2000 mg/kg

≠ diphenyl ether
Reference: Study report
Reliability (Klimisch Score): 2
Species: rat (female)
Exposition routes: oral
Results DL50: 2830 mg/kg

SKIN CORROSION / IRRITATION
Does not meet the classification criteria for this hazard class

≠ 2-propylheptanol ethoxylated, propoxylated
Method: OECD 404
Species: rabbit
Results: slightly irritating

≠ sodium (xylenes and 4-ethylbenzene)sulfonate
Reference: As described in the U.S. Federal Register Vol. 38, No. 187, Section 1500:41, 1973
Reliability (Klimisch score): 2
Species: rabbit (New Zealand White)

Results: not irritating according to the CLP Reg.

≠ diphenyl ether
Method: FIFRA PRIMARY DERMAL IRONITION STUDY
Reliability (Klimisch score): 1
Species: white rabbit (New Zealand)
Results: not irritating.

SERIOUS EYE DAMAGE / IRRITATION
Causes serious eye irritation

≠ 2-propylheptanol ethoxylated, propoxylated
Method: OECD 405
Species: rabbit
Results: irritant Cat. 2

≠ sodium (xylenes and 4-ethylbenzene)sulfonate
Method: OECD 405
Reliability (Klimisch score): 2
Species: Rabbit (Small White Russian)
Results: irritant Cat. 2

≠ diphenyl ether
Reference: Study Report (1973)
Reliability (Klimisch Score): 2
Species: rabbit
Results: irritating cat. 2.

RESPIRATORY OR SKIN SENSITISATION
Does not meet the classification criteria for this hazard class

≠ sodium (xylenes and 4-ethylbenzene)sulfonate
Method: OECD 406
Reliability (Klimisch score): 1
Species: Guinea pig (Dunkin-Hartley Female)
Results: not sensitizing

≠ diphenyl ether
Reference: Study Report (1970)
Reliability (Klimisch Score): 2
Species: man (male)
Results: non -sensitizing

GERM CELL MUTAGENICITY
Does not meet the classification criteria for this hazard class

≠ sodium (xylenes and 4-ethylbenzene)sulfonate
Method: Equivalent or similar to EPA OTS 798.5265
Reliability (Klimisch score): 1
In vitro test
Species: S. typhimurium TA 1535, TA 1537, TA 98, TA 100
Results: negative with metabolic activation - negative without metabolic activation
Method: OECD 474
Reliability (Klimisch score): 1
In vivo test
Species: Mouse (BOR:NMRI (SPF) Male/Female)
Exposure: oral
Results: negative

≠ diphenyl ether
Reference: Study Report (1987)
Reliability (Klimisch Score): 2
In vitro test
Species: Chinese hamster (ovaries)
Results: negative with metabolic activation - negative without metabolic activation

CARCINOGENICITY
Does not meet the classification criteria for this hazard class

≠ sodium (xylenes and 4-ethylbenzene)sulfonate

Method: equivalent or similar to OECD 453
Reliability (Klimisch score): 2
Species: Mouse (B6C3F1 Male/Female)
Exposure: dermal
Results NOAEL: >= 727 mg/kg body weight/day

REPRODUCTIVE TOXICITY
Does not meet the classification criteria for this hazard class

≠ sodium (xylenes and 4-ethylbenzene)sulfonate
Method: equivalent or similar to OECD 421
Reliability (Klimisch score): 1
Species: Rat (Sprague-Dawley Male/Female)
Exposure: oral
Results NOAEL (P0): 300 mg/kg body weight/day
Results NOAEL (F1): 1000 mg/kg body weight/day
The substance is not classified for this hazard class.

≠ diphenyl ether
Method: OECD 414
Reliability (Klimisch score): 1
Species: Rat (Sprague-Dawley)
Exhibition routes: oral
NOAEL results (development): 500 mg/kg body weight/day
LOAEL results (maternal): 50 mg/kg body weight/day
The substance is not classified for this danger class.

STOT - SINGLE EXPOSURE
Does not meet the classification criteria for this hazard class

≠ 2-propylheptanol ethoxylated, propoxylated
On the basis of the available data, the substance shows no specific toxicity effect for target organs for single exposure and is not classified in the relative CLP danger class.

≠ sodium (xylenes and 4-ethylbenzene)sulfonate
Based on the available data, the substance does not show any specific target organ toxicity effect for single exposure and is not classified under the related CLP hazard class

STOT - REPEATED EXPOSURE
Does not meet the classification criteria for this hazard class

≠ 2-propylheptanol ethoxylated, propoxylated
On the basis of the available data, the substance shows no specific toxicity effect for target organs for single exposure and is not classified in the relative CLP danger class.

≠ diphenyl ether
Method: OECD 408
Reliability (Klimisch Score): 1Specie: rat (Sprague-male/female Sprague)
Exhibition routes: oral
Results NOEL(male): 301 mg/kg body weight/day
Results NOEL (female): 335 mg/kg body weight/day

ASPIRATION HAZARD
Does not meet the classification criteria for this hazard class

≠ sodium (xylenes and 4-ethylbenzene)sulfonate
There are no data available for hazards in case of aspiration.

**11.2. Information on other hazards**
Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

## SECTION 12. Ecological information

**12.1. Toxicity**

≠ 2-propylheptanol ethoxylated, propoxylated

| | |
|---|---|
| LC50 - for Fish | > 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1 |
| EC50 - for Crustacea | > 10 mg/l/48h OECD - Guideline 202, part 1 |
| EC50 - for Algae / Aquatic Plants | > 10 mg/l/72h OECD - Guideline 201 |
| EC10 for Algae / Aquatic Plants | > 1 mg/l/72h OECD - Guideline 201 |

≠ sodium (xylenes and 4-ethylbenzene)sulfonate

| | |
|---|---|
| LC50 - for Fish | > 1000 mg/l/96h Eq. o sim. EPA OTS 797.1400; Oncorhynchus mykiss |
| EC50 - for Crustacea | > 1000 mg/l/48h EPA OTS 797.1300; Daphnia magna |
| Chronic NOEC for Algae / Aquatic Plants | 31 mg/l EPA OTS 797.1050; Pseudokirchneriella subcapitata |

≠ diphenyl ether

| | |
|---|---|
| LC50 - for Fish | 4,2 mg/l/96h Oncorhynchus mykiss; American Public Health Association. 1975 |
| EC50 - for Crustacea | 1,7 mg/l/48h Daphnia magna; American Public-Health -Association. 1975 |
| Chronic NOEC for Fish | 3,2 mg/l Oncorhynchus mykiss; American Public Health Association. 1975 |
| Chronic NOEC for Crustacea | 1 mg/l Daphnia magna; American Public-Health -Association. 1975 |

**12.2. Persistence and degradability**

≠ CITRIC ACID

| | |
|---|---|
| Solubility in water | > 10000 mg/l |
| Rapidly degradable | |

≠ 1,2-PROPANEDIOL

| | |
|---|---|
| Solubility in water | 1000 - 10000 mg/l |
| Rapidly degradable | |

≠ sodium (xylenes and 4-ethylbenzene)sulfonate

| | |
|---|---|
| Solubility in water | 664 g/l |
| Rapidly degradable | |

≠ diphenyl ether

Rapidly degradable
18 mg/l 25°C; OECD 105
18 mg/l 25°C; OECD 105 - American Public Health Association: 76% in 20d

**12.3. Bioaccumulative potential**

≠ CITRIC ACID

| | |
|---|---|
| BCF | 3,2 |

≠ 1,2-PROPANEDIOL

| | |
|---|---|
| Partition coefficient: n-octanol/water | -1,07 |
| BCF | 0,09 |

≠ sodium (xylenes and 4-ethylbenzene)sulfonate

| | |
|---|---|
| Partition coefficient: n-octanol/water | -3,12 Log Kow |

≠ diphenyl ether

| | |
|---|---|
| Partition coefficient: n-octanol/water | 4,21 Log Kow 25 °C |

**12.4. Mobility in soil**

≠ 1,2-PROPANEDIOL

| | |
|---|---|
| Partition coefficient: soil/water | 0,46 |

**12.5. Results of PBT and vPvB assessment**

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

**12.6. Endocrine disrupting properties**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

**12.7. Other adverse effects**

Information not available.

## SECTION 13. Disposal considerations

**13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

**14.1. UN number or ID number**
not applicable

**14.2. UN proper shipping name**
not applicable

**14.3. Transport hazard class(es)**
not applicable

**14.4. Packing group**
not applicable

**14.5. Environmental hazards**
not applicable

**14.6. Special precautions for user**
not applicable

**14.7. Maritime transport in bulk according to IMO instruments**
Information not relevant

## SECTION 15. Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
Seveso Category - Directive 2012/18/EU: None
Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006
Product
Point 3-40
Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
not applicable
Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.
Substances subject to authorisation (Annex XIV REACH)
None
Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None
Substances subject to the Rotterdam Convention:
None
Substances subject to the Stockholm Convention:
None
Healthcare controls
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

**15.2. Chemical safety assessment**
A chemical safety assessment has not been performed for the mixture
A chemical safety assessment has been performed for the following substances:
≠ citric acid
≠ sodium (xylenes and 4-ethylbenzene)sulfonate

## SECTION 16. Other information

This Safety Data Sheet was elaborated on the basis of the information contained in the SDS (Rev.1 of 13/08/2022) of the supplier of the mixture.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

| | |
|---|---|
| Eye Irrit. 2 | Eye irritation, category 2 |
| STOT SE 3 | Specific target organ toxicity - single exposure, category 3 |
| Aquatic Acute 1 | Hazardous to the aquatic environment, acute toxicity, category 1 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment, chronic toxicity, category 3 |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H400 | Very toxic to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects. |

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY
1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website

- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.