

AZIENDA CERTIFICATA



EURO COLD srl

Via Aldo Moro n.11/e - 41030 Bomporto (MO) Italy Tel. +39.059.8178138 r.a - Fax +39.059.8170482 P.IVA 02669040368 - REA MO 321144

Cap. Soc. € 153.000 i.v. Internet: www.eurocold.it e-mail: info@eurocold.it

Revision nr 7 Dated 29/05/2017 Printed on 29/05/2017

Safety Data Sheet

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

1.1. Product identifier

Code 038

Product name EUROCLEAN 1250

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

Intended use Prodotto formulato per la rimozione di depositi di ferro contenenti calcio in circuiti chiusi ricircolati .

Identified uses Industrial Professional Consumptions
Sector -

1.3. Emergency telephone number

For urgent inquiries refer to

Centro Antiveleni Ospedale Niguarda +39 0266101029

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 EC Regulation 1907/2006 and subsequent amendments.

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:

Serious eye damage, category 1 H318 Causes serious eye damage.

2.2. Label elements.

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



Signal words: Danger

Hazard statements:

H318 Causes serious eye damage.

Precautionary statements:

P280 Wear protective gloves / eye protection / face protection.

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

rinsing.

P310 Immediately call a POISON CENTER / doctor / . . .

Contains: 1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID



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2.3. Other hazards.

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

SECTION 3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification. Conc. %. Classification 1272/2008 (CLP).

1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC

ACID

CAS. 2809-21-4

 $3 \le x < 6$

Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335

EC. 220-552-8 INDEX. –

Nr. Reg. 01-2119510391-53-XXXX

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 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

There are no specific information on the symptoms and effects of the product.

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.



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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. Check incompatibility for container material in section 7. 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.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.



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8.1. Control parameters.

Information not available.

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. 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 Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear a hood visor or protective visor combined with airtight 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 B 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.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance liquid Colour colourless Odour odourless Not available. Odour threshold. 5.5 - 6.0Melting point / freezing point. Not available. Initial boiling point. 100 °C. Boiling range. Not available. Flash point. Not applicable. **Evaporation Rate** Not available. Flammability of solids and gases Not available. Lower inflammability limit. Not available. Upper inflammability limit. Not available. Lower explosive limit. Not applicable. Upper explosive limit. Not applicable. Vapour pressure. 23 hPa Vapour density Not available. Relative density. Not available. miscible Solubility Partition coefficient: n-octanol/water Not available. Auto-ignition temperature. Not applicable. Decomposition temperature. Not available.



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Viscosity Not available. Explosive properties Not available. Oxidising properties Not available.

9.2. Other information.

Information not available

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SECTION 10. Stability and reactivity.

10.1. Reactivity.

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

1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID: when heated to above 200°C/392°F it decomposes violently.

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.

10.4. Conditions to avoid.

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

10.5. Incompatible materials.

1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID: incompatible with oxidising agents and strong bases.

10.6. Hazardous decomposition products.

1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID: can develop phosphine, phosphuric acid and phosphorus oxides.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product

11.1. Information on toxicological effects.

Metabolism, kinetics, mechanism of action and other information

Information not available.

Information on likely ways of exposure

Information not available.

Immediate, delayed and chronic effects from short and long term exposures

Information not available.

Interactive effects

Information not available.

ACUTE TOXICITY

LC50 Inhalation: Not classified (no relevant component)



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LD50 Oral:>2000 mg/kg

LD50 Dermal: Not classified (no relevant component)

1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID > 2000 mg/kg Rat LD50 (Oral) > 7940 mg/kg Rabbit LD50 (Dermal)

DERMAL CORROSION / DERMAL IRRITATION

It does not meet the classification criteria for this class of danger

HARD EYE DAMAGES / EYES IRRITATION

It may cause serious eyes damages.

RESPIRATORY OR DERMAL SENSITIVITY

It does not meet the classification criteria for this class of danger

MUTAGENICITY ON GERMINAL CELLS

It does not meet the classification criteria for this class of danger

CARCINOGENICITY

It does not meet the classification criteria for this class of danger

TOXICITY FOR REPRODUCTION

It does not meet the classification criteria for this class of danger

SPECIFIC TOXICITY FOR TARGET ORGANS (STOT) - SINGLE EXPOSURE

It does not meet the classification criteria for this class of danger

SPECIFIC TOXICITY FOR TARGET ORGANS (STOT) - REPEATED EXPOSURE

It may cause damage to organs

DANGER IN CASE OF ASPIRATION

It does not meet the classification criteria for this class of danger

SECTION 12. Ecological information.

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity.

Information not available.

1-HYDROXYETHYLIDENE - 1,1-DIPHOSPHONIC ACID

LC50 - Fishes 868 mg/l/96h lepomis macrochirus EC50 - Shellfishes 527 mg/l/48h Daphnia magna

12.2. Persistence and degradability.

1-HYDROXYETHYLIDENE - 1,1-DIPHOSPHONIC ACID

Solubility in water. > 10000 mg/l

NOT rapidly biodegradable.

12.3. Bioaccumulative potential.

1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID Partition coefficient: n-

Partition coefficient: n- -3,5

octanol/water.

12.4. Mobility in soil.

1-HYDROXYETHYLIDENE - 1,1-DIPHOSPHONIC ACID

Partition coefficient: 4,22

soil/water

6/9

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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 greater than 0,1%.

12.6. 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 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 to be considered dangerous following the current instructions leading the transport of dangerous goods by road (A.D.R.) and by rail (RID), by sea (IMDG Code) and by air (IATA). Moreover the following transport instructions are not applicable:
14.1. UN 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.



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14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

Information not relevant.

SECTION 15. Regulatory information.

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

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.

Point. 3

Substances in Candidate List (Art. 59 REACH).

None

Substances subject to authorisarion (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 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.

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information.

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

Acute Tox. 4Acute toxicity, category 4Eye Dam. 1Serious eye damage, category 1Skin Irrit. 2Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

H302 Harmful if swallowed.
H318 Causes serious eye damage.
H315 Causes skin irritation.

H335 May cause respiratory irritation.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number



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- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 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 NUMBER: 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: EC Regulation 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 STEL: Short-term exposure limit
- TWA: Time-weighted average 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 (EU) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 of the European Parliament
- Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 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 (EÚ) 2015/1221 of the European Parliament (VII Atp. CLP)
- 11. Regulation (EU) 2016/918 of the European Parliament (VIII 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
- SDS template database of chemicals Ministero della Salute e Istituto Superiore di Sanità

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.

Modifiche rispetto alla revisione precedente

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 04 / 09 / 10 / 11 / 12 / 13 / 14 / 15.