

AZIENDA CERTIFICATA



Revision nr. 10 Dated 10/04/2019 Printed on 12/04/2019

## **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

# **Safety Data Sheet**

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

#### 1.1. Product identifier

Code

Product name

038

**EUROCLEAN 1250** 

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

Intended use Product for the removal of deposits containing iron and calcium in regenerating closed circuits.

Identified uses
Use sector (IDE PC37 0)

1.3. Emergency telephone number
For urgent inquiries refer to

City Hospital, Birmingham B187QH, United Kingdom. +44 121 507 4123
Centro Antiveleni Ospedale Niguarda +39 0266101029
Ancona Centro antiveleni – dalle 7.30 alle 13.30 Centro universitario ospedaliero

di farmacovigilanza Tel. 071-2181028 Bergamo Centro antiveleni- 24/24 ore, USSA Tossicologia Clinica Ospedali Riuniti

di Bergamo, Numero verde 800883300 Bologna Centro antiveleni- 24/24 ore, Ospedale Maggiore, Tel. 051-333333, 051-

6478955

Catania Centro antiveleni- 24/24 ore, Ospedale Garibaldi, Tel. 095-7594120/ 095-7594032, Numero verde 800410989

Chieti centro antiveleni- 24/24 ore, Ospedale Santissima Annunziata, Tel. 0871-551219

Firenze Centro antiveleni- 24/24, Ospedale Careggi, Tel. 055-7947819 Foggia Centro antiveleni, Università degli studi – Azienda ospedaliero universitaria Tel: 0881-732326

Genova Centro antiveleni – 24/24 ore- Ospedale San Martino Tel. 010-352808 La Spezia Centro antiveleni – 24/24 ore, Ospedale Civile Sant'Andrea, Tel. 0187-533296 /0187-533297

Lecce Centro antiveleni – 24/24 ore, Ospedale Vito Fazzi Tel. 0832-351105 Napoli Centro antiveleni – 24/24 ore, Ospedale Cardarelli Tel. 081-7472870/ 0815453333

Pavia Centro antiveleni – 24/24 ore, Centro Nazionale di Informazione Tossicologica Salvatore Maugeri, Tel. 0382- 24444

Pordenone Centro antiveleni – 24/24 ore, Ospedale Civile Tel. 0434-399698, 0434-399335

Reggio Calabria, Centro antiveleni – 24/24 ore Ospedale Riuniti, Tel. 0965-811624 Roma, Centro antiveleni – 24/24 ore– Policlinico A. Gemelli, Tel. 06-3054343 Torino Centro antiveleni, Istituto Anestesia e Rianimazione II Cattedra di Anestesia e Rianimazione, Tel. 011-6637637

Trieste Centro Antiveleni, Ospedale Infantile Burlo Garofalo Tel. 040-3785373-362

## **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 2015/830

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.



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#### 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:

**P280** Wear eye protection / face protection.

**P337+P313** If eye irritation persists: get medical advice/attention.

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  $1 \le x < 3$  Met. Corr. 1 H290, Acute Tox. 4 H302, Eye Dam. 1 H318,

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.



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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.



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## 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.

### 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. 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 Directive 89/686/EEC 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 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.



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

Appearance liquid Colour colourless Odour odourless Odour threshold. Not available. pH. 5,5 - 6,0Melting point / freezing point. 0°C 100 °C. Initial boiling point. 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. Solubility miscible Partition coefficient: n-octanol/water Not available. Auto-ignition temperature. Not applicable. Not available. Decomposition temperature. Viscosity Not available. Explosive properties Not available.

#### 9.2. Other information.

Information not available.

Oxidising properties

## SECTION 10. Stability and reactivity.

#### 10.1. Reactivity.

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

Not available.

1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID:

Decomposes at temperatures above 200°C/392°F.

## 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: strong oxidants, strong bases.

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### 10.6. Hazardous decomposition products.

1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID: may develop phosphine, phosphoric acid and phosphoryl oxides.

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## **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, toxicokinetics, mechanism of action and other information Information not available.

## Information on likely routes of exposure

Information not available.

<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u> Information not available.

#### Interactive effects

Information not available.

## **ACUTE TOXICITY**

LC50 (Inhalation) of the mixture: Not classified (no significant component) LD50 (Oral) of the mixture: >2000 mg/kg

LD50 (Dermal) of the mixture: Not classified (no significant component)

## 1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID

LD50 (Oral) > 2000 mg/kg Rat LD50 (Dermal) > 7940 mg/kg Rabbit

## SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

#### **SERIOUS EYE DAMAGES / IRRITATION**

Causes serious eyes irritation.

## RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

### **GERM CELL MUTAGENICITY**

Does not meet the classification criteria for this hazard class

## **CARCINOGENICITY**

Does not meet the classification criteria for this hazard class

#### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

## **STOT - SINGLE EXPOSURE**

Does not meet the classification criteria for this hazard class

## STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

## **ASPIRATION HAZARD**

Does not meet the classification criteria for this hazard class

## **SECTION 12. Ecological information.**



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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

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

#### 12.2. Persistence and degradability.

1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID Solubility in water

Solubility in water. > 10000 mg/l

NOT rapidly degradable.

#### 12.3. Bioaccumulative potential.

1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID

Partition coefficient: n-octanol/water. -3,5

## 12.4. Mobility in soil.

1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID

Partition coefficient: soil/water. 4,22

### 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 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 (A.D.R.) 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.



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C*LD° COOLING SYSTEMS	APPLICAZIONI FRIGORIFERE SPECIALI FLUID COOLERS SPECIAL COOLING APPLICATIONS AZIENDA CERTIFICATA	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
Not applicable.	φ <sup>NO</sup> 1509scteilteasions ₩ ₩	
14.2. UN proper shipping	name.	
Not applicable.		
14.3. Transport hazard cl	lass(es).	
Not applicable.		
14.4. Packing group.		
Not applicable.		
14.5. Environmental haza	arde	
Not applicable.		
14.6. Special precautions for user.		
Not applicable.		
14.7. Transport in bulk a	ccording to Annex II of MARPOL 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 – Direc	tive 2012/18/EC None.	
Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.		
Product. Point.	3	
Substances in Candidate L	List (Art. 59 REACH).	
On the basis of available d	lata, the product does not contain any SVHC in po	ercentage greater than 0,1%.
Substances subject to auth	norisation (Annex XIV REACH).	
None.		
Substances subject to exp	ortation reporting pursuant to (EC) Reg. 649/2012	<u>2:</u>
None.		
Substances subject to the Rotterdam Convention:		
None.		
Substances subject to the Stockholm Convention:		
None.		



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#### Healthcare controls.

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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:

Met. Corr. 1 Substance or mixture corrosive to metals, category 1

Acute Tox. 4 Acute toxicity, category 4 Eye Dam. 1 Serious eye damage, category 1 Eve irritation, category 2 Eye Irrit. 2 H290 May be corrosive to metals. H302 Harmful if swallowed.

H318 Causes serious eye damage. H319 Causes serious eye irritation.

#### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- 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
- 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 (EÚ) 2015/1221 of the European Parliament (VII Atp. CLP)



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- 11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP) 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X 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.

Modifiche rispetto alla revisione precedente

Changes to previous review: The following sections were modified: 03 / 09

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