

## Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

#### 1.1. Product identifier

Code: 411 00 00014-14-Yellow 200 ml  
411 00 16390-4005-Fuchsia 1 L  
411 00 16400-4010-Fuchsia 5 L  
411 00 17750-4505-Yellow 5 L  
411 00 18090-4685-Yellow 1 L

Product name: YELLOW/FUCHSIA READY ANTIFREEZE -40/-35°C 50%

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

Intended use: Antifreeze for motor vehicles ready for use

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

Name: Meccanocar Italia S.r.l.  
Full address: Via San Francesco, 22  
District and Country: 56033 Capannoli (PI)  
Italy

Tel. +39 0587 609433

Fax +39 0587 607145

e-mail address of the competent person  
responsible for the Safety Data Sheet

moreno.meini@meccanocar.it

#### 1.4. Emergency telephone number

For urgent inquiries refer to

National Poisons Information Service: +44 121 507 4123

### 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:

Acute toxicity, category 4

H302

Harmful if swallowed.

#### 2.2. Label elements

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

Hazard pictograms:

**YELLOW/FUCHSIA READY ANTIFREEZE -40/-35°C 50%**

Signal words: Warning

Hazard statements:

**H302** Harmful if swallowed.

Precautionary statements:

**P264** Wash hands thoroughly after handling.  
**P101** If medical advice is needed, have product container or label at hand.  
**P102** Keep out of reach of children.  
**P270** Do not eat, drink or smoke when using this product.  
**P501** Dispose of contents / container in accordance with local regulations.

**Contains:** GLICOL ETILENICO

### 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

### 3.2. Mixtures

Contains:

| Identification                 | x = Conc. %   | Classification 1272/2008 (CLP)    |
|--------------------------------|---------------|-----------------------------------|
| <b>GLICOL ETILENICO</b>        |               |                                   |
| CAS 107-21-1                   | 45 ≤ x < 47,5 | Acute Tox. 4 H302, STOT RE 2 H373 |
| EC 203-473-3                   |               |                                   |
| INDEX 603-027-00-1             |               |                                   |
| Reg. no. 01-2119456816-28-XXXX |               |                                   |

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**

**YELLOW/FUCHSIA READY ANTIFREEZE -40/-35°C 50%**

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****8.1. Control parameters**

Regulatory References:

|     |                |                                                                                                                                                                                                                                                                               |
|-----|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ESP | España         | LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)                                                                                                                                                                                                |
| FRA | France         | Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS                                                                                                                                                                                    |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Third edition, published 2018)                                                                                                                                                                                                           |
| ITA | Italia         | DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017                                                                                                                                                                                                                 |
| NOR | Norge          | Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5                                                                                   |
| PRT | Portugal       | Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018 |
| EU  | OEL EU         | 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 91/322/EEC.                                                                                                             |
|     | TLV-ACGIH      | ACGIH 2019                                                                                                                                                                                                                                                                    |

**GLICOL ETILENICO****Threshold Limit Value**

| Type                                     | Country | TWA/8h |     | STEL/15min |     | Remarks / Observations |
|------------------------------------------|---------|--------|-----|------------|-----|------------------------|
|                                          |         | mg/m3  | ppm | mg/m3      | ppm |                        |
| VLA                                      | ESP     | 52     | 20  | 104        | 40  | SKIN                   |
| VLEP                                     | FRA     | 52     | 20  | 104        | 40  | SKIN                   |
| WEL                                      | GBR     | 52     | 20  | 104        | 40  | SKIN                   |
| VLEP                                     | ITA     | 52     | 20  | 104        | 40  | SKIN                   |
| TLV                                      | NOR     | 52     | 20  |            |     | SKIN                   |
| VLE                                      | PRT     | 52     | 20  | 104        | 40  | SKIN                   |
| OEL                                      | EU      | 52     | 20  | 104        | 40  | SKIN                   |
| TLV-ACGIH                                |         |        |     | 10         |     | INHAL                  |
| TLV-ACGIH                                |         |        | 25  |            | 50  |                        |
| Predicted no-effect concentration - PNEC |         |        |     |            |     |                        |
| Normal value in fresh water              |         |        |     | 10         |     | mg/l                   |

**YELLOW/FUCHSIA READY ANTIFREEZE -40/-35°C 50%**

|                                              |       |       |
|----------------------------------------------|-------|-------|
| Normal value in marine water                 | 1     | mg/l  |
| Normal value for fresh water sediment        | 37    | mg/kg |
| Normal value for marine water sediment       | 3,7   | mg/kg |
| Normal value of STP microorganisms           | 199,5 | mg/l  |
| Normal value for the terrestrial compartment | 1,53  | mg/kg |

**Health - Derived no-effect level - DNEL / DMEL**

| Route of exposure | Effects on consumers |                |               |                  | Effects on workers |                |               |                  |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
|                   | Acute local          | Acute systemic | Chronic local | Chronic systemic | Acute local        | Acute systemic | Chronic local | Chronic systemic |
| Inhalation        |                      |                | 7 mg/m3       |                  |                    |                | 35 mg/m3      |                  |
| Skin              |                      |                |               | 53 mg/kg bw/d    |                    |                |               | 106 mg/kg bw/d   |

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.

**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.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

**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 II 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).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

**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**

**YELLOW/FUCHSIA READY ANTIFREEZE -40/-35°C 50%**

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                                 | yellow / fuchsia |
| Odour                                  | characteristic   |
| Odour threshold                        | Not available    |
| pH                                     | 7-8              |
| Melting point / freezing point         | Not available    |
| Initial boiling point                  | > 100 °C         |
| Boiling range                          | 100 °C           |
| Flash point                            | Not available    |
| Evaporation rate                       | Not available    |
| Flammability (solid, gas)              | Not available    |
| Lower inflammability limit             | Not available    |
| Upper inflammability limit             | Not available    |
| Lower explosive limit                  | Not available    |
| Upper explosive limit                  | Not available    |
| Vapour pressure                        | Not available    |
| Vapour density                         | 2                |
| Relative density                       | 1,04             |
| Solubility                             | soluble in water |
| Partition coefficient: n-octanol/water | Not available    |
| Auto-ignition temperature              | Not available    |
| Decomposition temperature              | Not available    |
| Viscosity                              | Not available    |
| Explosive properties                   | Not available    |
| Oxidising properties                   | Not available    |

**9.2. Other information**

Information not available

**SECTION 10. Stability and reactivity****10.1. Reactivity**

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

GLICOL ETILENICO

In the air absorbs moisture. 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.

GLICOL ETILENICO

Risk of explosion on contact with: perchloric acid. May react dangerously with: chlorosulphuric acid, sodium hydroxide, sulphuric acid, phosphorus pentasulphide, chromium (III) oxide, chromyl chloride, potassium perchlorate, potassium dichromate, sodium peroxide, aluminium. Forms explosive mixtures with: air.

**10.4. Conditions to avoid**

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

GLICOL ETILENICO

Avoid exposure to: sources of heat, naked flames.

**10.5. Incompatible materials**

Information not available

**10.6. Hazardous decomposition products**

GLICOL ETILENICO

May develop: hydroxyacetaldehyde, glyoxal, acetaldehyde, methane, carbon monoxide, hydrogen.

**SECTION 11. Toxicological information****11.1. Information on toxicological effects**Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

GLICOL ETILENICO

LAVORATORI: inalazione; contatto con la cute.

POPOLAZIONE: inalazione aria ambiente; contatto con la cute di prodotti contenenti la sostanza.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

GLICOL ETILENICO

By ingestion it initially stimulates the central nervous system; subsequently a phase of depression takes over. Kidney damage can occur, with anuria and uremia. The symptoms of overexposure are: vomiting, drowsiness, difficult breathing, convulsions. The lethal dose for humans is approximately 1.4 ml / kg.

**YELLOW/FUCHSIA READY ANTIFREEZE -40/-35°C 50%**Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:  
Not classified (no significant component)  
LD50 (Oral) of the mixture:  
1111,11 mg/kg  
LD50 (Dermal) of the mixture:  
Not classified (no significant component)

## GLICOL ETILENICO

Method: Not indicated

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: LD50 = 7712 mg / kg bw

Method: Not indicated

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Inhalation (aerosol)

Results: LC50 > 2.5 mg / L air

Bibliographic reference: Evaluation of the Developmental Toxicity of Ethylene Glycol Aerosol in the CD Rat and CD-1 Mouse by Whole-Body Exposure, Tyl RW, Ballantyne B, Fisher LC, Fait DL, Savine TA, Dodd DE, Klonne DR, Pritts IM (1995)

Method: Not indicated

Reliability: 2

Species: Mouse (CD-1; male / female)

Route of exposure: Dermal

Results: LD50 > 3500 mg / kg bw

Bibliographic reference: Assessment of the Developmental Toxicity of Ethylene Glycol Applied Cutaneously to CD-1 Mice, Tyl RW, Fisher LC, Kubena MF, Vrbanic MA, Losco PE (1995)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

## GLICOL ETILENICO

Method: Not indicated

Reliability: 2

Species: Rabbit (Vienna White)

Route of exposure: Dermal

Results: Not classified

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

## GLICOL ETILENICO

Method: Not indicated

Reliability: 2

Species: Rabbit (Vienna White)

Route of exposure: Ocular

Results: Not classified



**YELLOW/FUCHSIA READY ANTIFREEZE -40/-35°C 50%**RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Skin sensitization  
GLICOL ETILENICO

Method: Not indicated

Reliability: 2

Species: guinea pig (Dunkin-Hartley; male / female)

Route of exposure: Dermal

Results: Not classified

Bibliographic reference: Evaluation of Skin Irritation and Sensitization of Two Diol Solutions used as Experimental Dentin Primers in Humans and Guinea Pigs, Kurihara A, Manabe A, Katsuno K, Itoh K, Hisimitsu H, Wakumoto S, Yoshida T (1996)

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

GLICOL ETILENICO

Method: OECD 471 in vitro test

Reliability: 1

Species: S. typhimurium

Results: Negative with and without metabolic activation

Method: Not indicated - in vivo test

Reliability: 2

Species: Rat (Fischer 344; male / female)

Route of exposure: Oral

Results: Negative

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

GLICOL ETILENICO

The available studies have not shown carcinogenic power. In a 2-year carcinogenicity study, conducted by the US National Toxicology Program (NTP), in which ethylene glycol was administered in feeding, "no evidence of carcinogenic activity" was observed in male and female B6C3F1 mice (NTP, 1993).

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

GLICOL ETILENICO

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

**YELLOW/FUCHSIA READY ANTIFREEZE -40/-35°C 50%**

## GLICOL ETILENICO

Method: OECD 410

Reliability: 1

Species: Dog (Beagle; male / female)

Route of exposure: Dermal

Results: NOAEL &gt; 2 200 - &lt; 4 400 mg / kg bw / day

Target organ

GLICOL ETILENICO

Kidney

Route of exposure

GLICOL ETILENICO

Oral

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

**SECTION 12. Ecological information****12.1. Toxicity**

GLICOL ETILENICO

LC50 - for Fish

72860 mg/l/96h

EC10 for Algae / Aquatic Plants

100 mg/l/72h

Chronic NOEC for Algae / Aquatic Plants

100 mg/l

**12.2. Persistence and degradability**

GLICOL ETILENICO

GLICOL ETILENICO

Solubility in water

1000 - 10000 mg/l

Rapidly degradable

**12.3. Bioaccumulative potential**

GLICOL ETILENICO

Partition coefficient: n-octanol/water

-1,36

**12.4. Mobility in soil**

Information not available

**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 (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**

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. Transport in bulk according 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 - Directive 2012/18/EC: None

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

|                |   |
|----------------|---|
| <u>Product</u> |   |
| Point          | 3 |

Substances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (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**

**YELLOW/FUCHSIA READY ANTIFREEZE -40/-35°C 50%**

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

**SECTION 16. Other information**

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

|                     |                                                                    |
|---------------------|--------------------------------------------------------------------|
| <b>Acute Tox. 4</b> | Acute toxicity, category 4                                         |
| <b>STOT RE 2</b>    | Specific target organ toxicity - repeated exposure, category 2     |
| <b>H302</b>         | Harmful if swallowed.                                              |
| <b>H373</b>         | May cause damage to organs through prolonged or repeated exposure. |

**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 (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 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 (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) 2018/1480 (XIII Atp. CLP)
16. Regulation (EU) 2019/521 (XII Atp. CLP)

**YELLOW/FUCHSIA READY ANTIFREEZE -40/-35°C 50%**

- 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.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.