



# MATERIAL SAFETY DATA SHEET

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Version : 3

Date : 23 / 1 / 2017

Supersedes : 13 / 8 / 2015

**FRIOGEL NEO -20****105400100**

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

### 1.1. Product identifier

Trade name : FRIOGEL NEO -20

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

1.2.1 Relevant identified uses : Antifreeze for central heating installations and frozen water installations

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

: DEHON SERVICE  
26 Avenue du Petit Parc  
94683 VINCENNES Cedex France  
Tel : +33 (0) 1 43 98 75 00  
Fax : +33 (0) 1 43 98 21 51

e-mail : ContactFDS@climalife.dehon.com

### 1.4 Emergency telephone number

: EMERGENCY TELEPHONE NUMBER (24h/24) : + 33 (0) 1 72 11 00 03  
Anti-poison Center : INRS/ORFILA (France) : +33 (0) 1 45 42 59 59  
Anti-poison Centre (Belgium) : +32 70 245 245  
Anti-poison Centre (Spain) : +34 91 562 04 20  
Anti-poison Centre (Finland/Estonia) : +358 9 471977  
Anti-poison Centre (Netherlands) : +31 30 274 8888  
Anti-poison Centre (United Kingdom) : +44 870 600 6266  
Poisons Information Centre (Hungary) : +36 80 201 199

## SECTION 2 Hazards identification

### 2.1. Classification of the substance or mixture

2.1.1. Regulation (EC) No 1272/2008 (CLP) : Not classified as dangerous product.

### 2.2. Label elements

2.2.1 Labelling EC 1272/2008 (CLP) : None

### 2.3. Other hazards

: -

## SECTION 3 Composition/information on ingredients

3.1./3.2. Substance / Preparation : Preparation

### Components contributing to the hazard :

Substance name	Contents	CAS No	EC No	Index No	Ref REACH	Classification
Propane-1,2-diol	: 20 to 40 %	57-55-6	200-338-0	----	01-2119456809-23	Not classified. (DSD/DPD) Not classified. (GHS)

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**FRIOGEL NEO -20**
**105400100**
**SECTION 4 First aid measures**
**4.1. Description of first aid measures**

- Inhalation** : Not specifically applicable  
If you feel unwell, seek medical advice.  
Assure fresh air breathing.
- Skin contact** : Wash with soapy water  
If case of redness or irritation, call a doctor
- Eye contact** : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum)  
If irritation persists, consult an eye specialist
- Ingestion** : Rinse mouth out with water  
Never attempt to induce vomiting  
consult a doctor

**4.2. Most important symptoms and effects, both acute and delayed** : No information available

**4.3. Indication of any immediate medical attention and special treatment needed** : No information available

**SECTION 5 Fire-fighting measures**
**5.1. Extinguishing media**

**Suitable extinguishing media** : Carbon dioxide (CO<sub>2</sub>)  
Water spray  
Alcohol resistant foam  
Powders

**Unsuitable extinguishing media** : Strong water jet

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

**Specific hazards** : During combustion : Toxic vapours are released (CO, CO<sub>2</sub>)

**5.3. Advice for firefighters**

**Specific fire fighting methods** : Cool down the containers exposed to heat with a water spray  
Do not attempt to fight the fire without suitable protective equipment  
Clear the danger area

**Protection of fire-fighters** : Complete protective clothing  
Self-contained breathing apparatus

**SECTION 6 Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures** : Only qualified personnel equipped with suitable protective equipment may intervene  
Avoid contact with skin and eyes  
Do not breathe vapours  
Remove all sources of ignition  
Do not smoke  
Caution : this product can cause the floor to be slippery

**6.2. Environmental precautions** : Contain the spilled material by bunding  
Prevent the product from entering drains

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

**- Neutralization** : Absorb spillage with:  
- inert material (sand, earth)

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**SECTION 6 Accidental release measures (continued)**

- Disposal : Dispose of contaminated materials in accordance with current regulations.
- 6.4 Reference to other sections : For further information refer to section 8 "Exposure controls/personal protection"

**SECTION 7 Handling and storage**
**7.1. Precautions for safe handling**

- Technical measures** : Ensure good ventilation of the work station  
Vapour extraction at source
- Precautions** : Handle in well ventilated areas  
Remove all sources of ignition  
Avoid high temperatures.  
Take precautionary measures against static discharges.  
Smoking is forbidden
- Industrial hygiene** : Always wash hands after handling the product  
Always take a shower after work.  
Do not drink, eat or smoke in the workplace

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

- Storage conditions**
- Recommended : Store :
  - the container tightly closed and dry
  - in a dry, well-ventilated area
  - away from any source of ignition

- Incompatible products** : Strong oxidizing agents

- Packaging materials**
- Recommended : Stainless steel  
Aluminium.  
Polyethylene
- Not suitable : Galvanized steel  
Zinc

**7.3. Specific end use(s)**
**SECTION 8 Exposure controls/personal protection**
**8.1. Control parameters**

- Engineering measures** : Ensure good ventilation of the work station
- 8.1.1. Occupational Exposure Limits : Propane-1,2-diol : United Kingdom : WEL - TWA (8h; mg/m<sup>3</sup>) : 474  
Propane-1,2-diol : United Kingdom : WEL - TWA (8h; ppm) : 150

**8.2. Exposure controls**

- Personal protection :**
- Respiratory protection : If the ventilation is suitable, it is not essential to wear respiratory equipment  
In case of insufficient ventilation, wear suitable respiratory equipment.  
Mask with A canister
- Hand protection : Nitrile-rubber protective gloves  
Permeation rates according to EN 374 : 6 (breakthrough time > 480 min)
- Eye protection : Safety goggles
- Skin protection : Wear suitable protective clothing.

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**SECTION 9 Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**
**9.1.a. Appearance**
**Physical state** : Liquid

**Colour** : Red

**9.1.b. Odour** : None

**9.1.c. Odour threshold** : No information available

**9.1.d. pH** : 7.5 - 9

**9.1.e. Melting point / Freezing point** : - 20 °C

**9.1.f. Initial boiling point - boiling range** : + 104 °C

 \* **9.1.g. Flash point** : Not applicable

**9.1.h. Evaporation rate** : No information available

**9.1.i. Flammability** : Difficult to ignite

**9.1.j. Explosion limits (lower - upper)** : Propane-1,2-diol :

**Explosion limits - lower** : 2.4 % (volume)

**Explosion limits - upper** : 17.4 % (volume)

**9.1.k. Vapour pressure** : No data

**9.1.l. Vapour density** : No data

**9.1.m. Density** : 1035 kg/m<sup>3</sup> at 20 °C

**9.1.n. Solubility**
**-in water** : Complete

**9.1.o. Partition coefficient : n-octanol / water** : - 1.07 ( Propane-1,2-diol )

**9.1.p. Auto-ignition temperature** : 371 °C

**9.1.q. Thermal decomposition** : No data

**9.1.r. Viscosity** : No data

**9.1.s. Explosive Properties** : Not explosive material according to EC criteria

**9.1.t. Oxidising properties** : Non oxidizing material according to EC criteria

**9.2. Other information**
**SECTION 10 Stability and reactivity**
**10.1. Reactivity** : No dangerous reactions known under normal conditions of use  
At temperatures above flash point : increased risk of fire / explosion

**10.2. Chemical stability** : Stable at ambient temperature and under normal conditions of use

**10.3. Possibility of hazardous reactions** : May form flammable vapour-air mixtures.

Reacts violently with :

- strong oxidizing agents.

- strong acids

**10.4. Conditions to avoid** : - high temperatures, naked flames

**10.5. Incompatible materials** : - water, humidity  
- strong acids  
- strong oxidizing agents  
- zinc and its alloys.

**10.6. Hazardous decomposition products** : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases

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**SECTION 10 Stability and reactivity (continued)**
**SECTION 11 Toxicological information**
**11.1. Information on toxicological effects**
**Acute toxicity**
**On ingredients**
**Propane-1,2-diol** : Rabbit dermal, LD50 [mg/kg] : 20800

: Rat oral LD50 [mg/kg] : 20000

- **Skin corrosion/irritation** : Not irritating to skin
- **Serious eye damage/irritation** : May cause slight temporary irritation to ocular mucous membranes
- **Respiratory or skin sensitisation** : No sensitizing effect is known
- **Germ cell mutagenicity** : No information available
- **Carcinogenicity** : No information available
- **Reproductive toxicity** : No information available
- **STOT-single exposure** : No information available
- **STOT-repeated exposure** : No information available
- **Aspiration hazard** : No information available

**SECTION 12 Ecological information**
**12.1. Toxicity**
**Effects on the aquatic environment**
**On ingredients**

- Propane-1,2-diol** : 48 Hour - EC50 - Daphnia magna [mg/l] : 1000  
 : 72 Hour - EC50 - Algae (Selenastrum capricornutum) [mg/l] : 1000  
 : 96 Hours - LC50 - Fish (Pimephales Promelas) [mg/l] : 1000

**12.2. Persistence and degradability** : Readily biodegradable

**12.3. Bioaccumulative potential** : Propylene Glycol : - 1.07

**12.4. Mobility in soil** : No information available

**12.5. Results of PBT and vPvB assessment** : This mixture contains no substance meeting PBT and vPvB criteria

**12.6. Other adverse effects**
**SECTION 13 Disposal considerations**
**13.1. Waste treatment methods**
**WASTE FROM PRODUCT :**
**Destruction/Disposal** : Dispose of in accordance with relevant local regulations

**CONTAMINATED PACKAGING :**
**Destruction/Disposal** : Destroy at an authorised site

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**FRIOGEL NEO -20****105400100****SECTION 14 Transport information**

RID/ADR/IMDG/IATA : Not regulated

**SECTION 15 Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture** : Ensure all national/local regulations are observed.

France : Professional diseases(table(s) nr 84) : applicable

Germany : Water hazard class : 1 (specific classification)

**15.2. Chemical safety assessment** : No information available**SECTION 16 Other information****Further information** : Product for professional use only  
For more information regarding the use of this product, please refer to our technical information or contact the sales department in your region  
This safety data sheet has been written in conformity with the regulation (UE) 453/2010.**\* Update** : Modifications are indicated by an asterisk (\*)

This sheet complements the technical sheets but does not replace them. The information given is based on our knowledge of the product, at the time of publication. It is given in good faith.

Besides, the attention of the user is drawn to the possible risks incurred by using the product for any other use than that for which it was intended.

In no way does this exempt the user from knowing and applying all the regulations controlling his activity. He alone will take on the responsibility for taking the precautions involved by the use of the product.

The aim of all the mandatory regulations mentioned is just to help the user to fulfil his obligations regarding the use of hazardous products.

This information must not be considered exhaustive. It does not exempt the user from ensuring that other obligations than those mentioned could apply, related to the storage and use of the product, this being his sole responsibility.

**End of document****DEHON SERVICE**

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