

**NEUTRAGEL NEO -13**
**105425000**
**SECTION 1 Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**
**Trade name** : NEUTRAGEL NEO -13

**1.2. Relevant identified uses of the substance or mixture and uses advised against**
**1.2.1 Relevant identified uses** : Antifreeze for heating circuit, iced water production

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

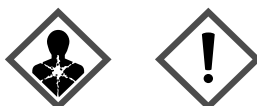
 : DEHON SERVICE  
 26 Avenue du Petit Parc  
 94683 VINCENNES Cedex France  
 Tel : +33 (0) 1 43 98 75 00  
 Fax : +33 (0) 1 43 98 21 51

**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 (Netherlands) : +31 30 274 8888  
 Anti-poison Centre (Spain) : +34 91 562 04 20  
 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)**
**Health hazards** : Acute toxicity, Oral - Category 4 (Acute Tox. 4) - H302  
 Specific Target Organ Toxicity - Repeated exposure - Category 2 (STOT RE 2) - H373

**2.2. Label elements**
**2.2.1 Labelling EC 1272/2008 (CLP)**
**Contains** : Ethanediol

**Hazard pictograms**

**Signal words**

: Warning

**Hazard statements**

 : H302 : Harmful if swallowed  
 H373 : May cause damage to organs (kidneys) through prolonged or repeated exposure.

**Precautionary statements :**

- **Prevention** : P260 : Do not breathe dust/fume/gas/mist/vapours/spray.
- **Response** : P301+P312 : If swallowed, call a doctor if you feel unwell.  
P330 : Rinse mouth.
- **Disposal considerations** : P501 : Dispose of contents / container to an authorized center in accordance with national regulation

**2.3. Other hazards**

: None under normal conditions

**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

**In case of emergency : +33 (0) 1 72 11 00 03**

**NEUTRAGEL NEO -13**
**105425000**
**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
Ethanediol	: 20 to 30 %	107-21-1	203-473-3	603-027-00-1	01-2119456816-28	Xn; R22 Acute Tox. 4 (Oral);H302 STOT RE 2,H373

**SECTION 4 First aid measures**
**4.1. Description of first aid measures**
**Inhalation** : Move the affected person away from the contaminated area and into the fresh air  
If symptoms persist call a doctor

**Skin contact** : Remove all contaminated clothing and footwear  
Wash with soapy water  
If case of redness or irritation, call a doctor

**Eye contact** : Rinse immediately with plenty of water (for at least 15 minutes)  
Consult an eye specialist if necessary

**Ingestion** : Rinse mouth out with water  
Never attempt to induce vomiting  
Do NOT give the affected person anything to drink, even if he is fully conscious  
Call a doctor immediately

**4.2. Most important symptoms and effects, both acute and delayed** : Headaches  
Nausea  
Vomiting  
Central Nervous System depressant

**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 (CO2)  
Water spray  
Foam  
Powders

**5.2. Special hazards arising from the substance or mixture**
**Specific hazards** : Toxic gases are released

**5.3. Advice for firefighters**
**Specific fire fighting methods** : Cool down the containers exposed to heat with a water spray

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

**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

**In case of emergency : +33 (0) 1 72 11 00 03**

**NEUTRAGEL NEO -13**
**105425000**
**SECTION 6 Accidental release measures**

- 6.1. Personal precautions, protective equipment and emergency procedures** : Avoid contact with skin and eyes  
Do not breathe vapours  
Do not attempt to take action without suitable protective equipment  
Remove all sources of ignition
- 6.2. Environmental precautions** : Avoid direct discharge into drains  
Contain the spilled material by bunding
- 6.3. Methods and material for containment and cleaning up** : Absorb spillage with:  
- inert material (sand, earth)  
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**  
**Precautions** : Handle in well ventilated areas  
Avoid any direct contact with the product  
Keep away from ignition sources (including static discharges).  
Smoking is forbidden
- Industrial hygiene** : Do not drink, eat or smoke in the workplace
- 7.2. Conditions for safe storage, including any incompatibilities**  
**Storage conditions**
- Recommended** : Store :  
- away from any source of ignition  
- in a cool, well-ventilated area  
- the container tightly closed and dry
- Incompatible products** : Strong oxidizing agents
- Packaging materials**
- Recommended** : Coated steels  
Plastic materials
- Not suitable** : Galvanised receptacles  
Aluminium.
- 7.3. Specific end use(s)** : No data

**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** : Ethanediol : France : LEP - VME (8h; mg/m<sup>3</sup>) : 52  
Ethanediol : France : LEP - VME (8h; ppm) : 20  
Ethanediol : France : LEP - VLE (15min; mg/m<sup>3</sup>) : 104  
Ethanediol : France : LEP - VLE (15min; ppm) : 40  
Ethanediol : United Kingdom : WEL - TWA (8h; mg/m<sup>3</sup>) : 52  
Ethanediol : United Kingdom : WEL - STEL (15min; mg/m<sup>3</sup>) : 104  
Ethanediol : United Kingdom : WEL - STEL (15min; ppm) : 40  
Ethanediol : Germany : MAK - TWA (8h; mg/m<sup>3</sup>) : 26  
Ethanediol : Germany : MAK - TWA (8h; ppm) : 10  
Ethanediol : Germany : MAK - STEL (15min; mg/m<sup>3</sup>) : 52  
Ethanediol : Germany : MAK - STEL (15min; ppm) : 20  
Ethanediol : Netherlands : MAC - TWA (8h; mg/m<sup>3</sup>) : 104  
Ethanediol : Netherlands : MAC - STEL (15min; mg/m<sup>3</sup>) : 52  
Ethanediol : Switzerland : LEP - VME (8h; mg/m<sup>3</sup>) : 26

**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

**In case of emergency : +33 (0) 1 72 11 00 03**

**NEUTRAGEL NEO -13**
**105425000**
**SECTION 8 Exposure controls/personal protection (continued)**

 Ethanediol : Switzerland : LEP - VME (8h; ppm) : 10  
 Ethanediol : Switzerland : LEP - VLE (15min; mg/m<sup>3</sup>) : 52  
 Ethanediol : Switzerland : LEP - VLE (15min; ppm) : 20

**8.2. Exposure controls**
**Personal protection :**

- **Respiratory protection** : No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.  
If the occupational exposure limit is exceeded : Mask with A canister
- **Hand protection** : Protective gloves made of PVC.  
Neoprene protective gloves  
Nitrile-rubber protective gloves
- **Eye protection** : Safety goggles

**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** : sweet

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

**9.1.d. pH** : ~ 8.5

**9.1.e. Melting point / Freezing point** : ~ -13 °C

**9.1.f. Initial boiling point - boiling range** : 102°C

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

**9.1.h. Evaporation rate** : No data

**9.1.i. Flammability** : Non flammable.

**9.1.j. Explosion limits (lower - upper)**
**Explosion limits - lower** : Ethylene glycol : 3.2 % (volume)

**Explosion limits - upper** : Ethylene glycol : 53 % (volume)

**9.1.k. Vapour pressure** : No information available

**9.1.l. Vapour density** : No information available

**9.1.m. Density** : 1.036 g/cm<sup>3</sup> at 20 °C

**9.1.n. Solubility**
**-in water** : Miscible in all proportions

**9.1.o. Partition coefficient : n-octanol / water** : Ethylene glycol : -1.36

**9.1.p. Auto-ignition temperature** : Ethylene glycol : 410°C

**9.1.q. Thermal decomposition** : > 200°C

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

**9.1.s. Explosive Properties** : Not explosive material according to EC criteria  
Can form explosive mixtures with air

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

**9.2. Other information** : No information available

**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

**In case of emergency : +33 (0) 1 72 11 00 03**

**NEUTRAGEL NEO -13**
**105425000**
**SECTION 9 Physical and chemical properties (continued)**
**SECTION 10 Stability and reactivity**

- 10.1. Reactivity**  
**10.2. Chemical stability** : Stable at ambient temperature and under normal conditions of use  
**10.3. Possibility of hazardous reactions** : May react violently with acids.  
**10.4. Conditions to avoid** : - water, humidity  
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
**10.5. Incompatible materials** : - strong acids  
 - strong bases  
 - strong oxidizing agents  
**10.6. Hazardous decomposition products** : On combustion or on thermal decomposition (pyrolysis) releases :  
 Carbon oxides (CO, CO<sub>2</sub>)

**SECTION 11 Toxicological information**

- 11.1. Information on toxicological effects**  
 • **Acute toxicity** : Harmful if swallowed  
**On ingredients**  
**Ethanediol** : Rat inhalation LC50 [mg/l] : > 2.5 / 6h  
 : Rabbit dermal, LD50 [mg/kg] : 9530  
 : Rat oral LD50 [mg/kg] : 7712  
 • **Skin corrosion/irritation** : May cause slight irritation to the skin  
 • **Serious eye damage/irritation** : Not irritating to eyes  
 • **Respiratory or skin sensitisation** : No sensitizing effect is known  
 • **Germ cell mutagenicity** : No mutagenic effect  
 • **Carcinogenicity** : No carcinogenic effect  
 • **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** : The product does not have any known adverse effect on the tested aquatic organisms  
**On ingredients**  
**Ethanediol** : 48 Hours - LC50 - Daphnia magna [mg/l] : > 100  
 : 96 Hours - LC50 - Fish (Oncorhynchus mykiss) [mg/l] : 18500  
 : 96 Hour - EC50 - Algae (Selenastrum capricornutum) [mg/l] : 6500 to 13000  
 : 96 Hours - LC50 - Fish (Pimephales Promelas) [mg/l] : 72860  
**12.2. Persistence and degradability** : Readily biodegradable

**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

**In case of emergency : +33 (0) 1 72 11 00 03**

**NEUTRAGEL NEO -13**
**105425000**
**SECTION 12 Ecological information (continued)**

- 12.3. Bioaccumulative potential** : Not potentially bioaccumulable.  
**Octanol/water partition coefficient** : Ethylene glycol : - 1.36  
**12.4. Mobility in soil** : Ethylene glycol : Very mobile in soil.  
**12.5. Results of PBT and vPvB assessment** : Ethylene glycol : This substance is considered not to be PBT and vPvB  
**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  
**NOTE** : The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal

**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 :** : WGK (Water-endangermant class) : 1  
**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.  
**Text of R-Phrases in § 3** : R22 : Harmful if swallowed.  
**Text of H-Phrases in § 3** : H302 - Harmful if swallowed  
 H373 - May cause damage to organs ... through prolonged or repeated exposure ....  
**\* 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 mentionned is just to help the user to fulfil his obligations regarding the use of hazardous products.

**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

**In case of emergency : +33 (0) 1 72 11 00 03**

	<b>MATERIAL SAFETY DATA SHEET</b>	Page : 7 / 7
		Version : 3
		Date : 23 / 1 / 2017
		Supersedes : 17 / 6 / 2015
<b>NEUTRAGEL NEO -13</b>		<b>105425000</b>

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**

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

**In case of emergency : +33 (0) 1 72 11 00 03**

