

Safety Data Sheet

according to 1907/2006/EC, Article 31

Revision: 18.06.2008

1. Identification of the substance/preparation and of the company/undertaking

Product details

Trade name : **Vetus Organic Coolant -38**
Article number : 99.40.11
Application of the substance / the preparation : Engine Antifreeze
Manufacturer/Supplier : Vetus N.V.
Fokkerstraat 571
3125 BD Schiedam-Holland
Tel.: +31 (0)10 4377700
Further information obtainable from : Product safety department - info@vetus.nl
Information in case of emergency : +31 (0)10 4377700 (9 AM to 4 PM, Monday to Friday)

2. Hazards identification

Hazard description:



Xn Harmful

Information concerning particular hazards for human and environment

: The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
R 22 Harmful if swallowed.

Classification system

: The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

GHS label elements



Warning

3.1/4 - Harmful if swallowed.

Prevention

: Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Response

: *IF SWALLOWED*: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Disposal

: Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Description

: Mixture of substances listed below with nonhazardous additions.

Dangerous components:			
CAS: 107-21-1 EINECS: 203-473-3	ethanediol	Xn; R 22	50-100%
		Danger: 3.1.O/3	

Additional information

: For the wording of the listed risk phrases refer to section 16.

4. First-aid measures

General information

: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation

: Supply fresh air; consult doctor in case of complaints.

After skin contact

: Generally the product does not irritate the skin.

After eye contact

: Rinse opened eye for several minutes under running water.

After swallowing

: Call for a doctor immediately.

Information for doctor

:

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The following symptoms may occur

: Nausea
Dizziness
Unconsciousness
Headache

Treatment

: If swallowed or in case of vomiting, danger of entering the lungs.

5. Fire-fighting measures

Suitable extinguishing agents

: Water haze
Alcohol resistant foam
Fire-extinguishing powder
Carbon dioxide

Special hazards caused by the substance, its products of combustion or resulting gases

: Formation of toxic gases is possible during heating or in case of fire.

Protective equipment

: Wear self-contained respiratory protective device.
Wear fully protective suit.

6. Accidental release measures

Person-related safety precautions

: Wear protective clothing.

Measures for environmental protection

: Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

Measures for cleaning/collecting

: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

Additional information

: See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. Handling and storage

Handling

:

Information about fire - and explosion protection

: No special measures required.

Storage

:

Requirements to be met by storerooms and receptacles

: Store only in the original receptacle.

Information about storage in one common storage facility

: Not required.

Further information about storage conditions

: Store in cool, dry conditions in well sealed receptacles.

8. Exposure controls/personal protection

Additional information about design of technical facilities

: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:

107-21-1 ethanediol

WEL	Short-term value: 104*mg/m ³ , 40*ppm Long-term value: 1052*mg/m ³ , 20*ppm Sk *particulate **vapour
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Additional information

: The lists valid during the making were used as basis.

Personal protective equipment

:

General protective and hygienic measures

: Keep away from foodstuffs, beverages and feed.

Respiratory protection

: Not required.

Protection of hands

:



Protective gloves

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection : Goggles recommended during refilling

Body protection : Protective work clothing

9. Physical and chemical properties

General Information

Form : Fluid
Colour : Blue
Odour : Characteristic

Change in condition

Melting point/Melting range : Undetermined.
Boiling point/Boiling range : > 101°C

Flash point : Not applicable.

Ignition temperature : 410°C

Self-igniting : Product is not selfigniting.

Danger of explosion : Product does not present an explosion hazard.

Explosion limits

:
Lower : 3.2 Vol %
Upper : 53.0 Vol %

Vapour pressure at 20°C : 23 hPa

Density at 20°C : 1.077 g/cm³

Solubility in / Miscibility with water : Fully miscible.

pH-value at 20°C : 8.2

Solvent content:

Organic solvents : 0.0 %
Water : 46.9 %

10. Stability and reactivity

Thermal decomposition / conditions to be avoided

: To avoid thermal decomposition do not overheat.

Dangerous reactions : Reacts with strong oxidizing agents.

Dangerous decomposition products : No dangerous decomposition products known.

11. Toxicological information

Acute toxicity :

LD/LC50 values relevant for classification:		
107-21-1 ethanediol		
Oral	LD 50	5840 mg/kg (rat)
Dermal	LD 50	9530 mg/kg (rabit)

Primary irritant effect:

on the skin : No irritant effect.

on the eye : No irritating effect.

Sensitization : No sensitizing effects known.

Additional toxicological information : The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful

12. Ecological information

Information about elimination (persistence and degradability):

Other information : The product is biodegradable.

General notes : *Water hazard class 1 (German Regulation) (Self-assessment)*: slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13. Disposal considerations

Product:

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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European waste catalogue	
16 01 14	antifreeze fluids containing dangerous substances

Uncleaned packaging :

Recommendation : Disposal must be made according to official regulations.

Recommended cleansing agents : Water, if necessary together with cleansing agents.

14. Transport information

Land transport ADR/RID (cross-border)

ADR/RID class :-

Maritime transport IMDG :

IMDG Class :-

Marine pollutant : No

Air transport ICAO-TI and IATA-DGR :

ICAO/IATA Class :-

UN "Model Regulation" :-

15. Regulatory information

Labelling according to EU guidelines : The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product :



Xn Harmful

Hazard-determining components of labelling : ethanediol

Risk phrases : 22 Harmful if swallowed.

Safety phrases : 2 Keep out of the reach of children.
24/25 Avoid contact with skin and eyes.
46 If swallowed, seek medical advice immediately and show this container or label.

National regulations :

Technical instructions (air):

Class	Share in %
Water	25-50
NK	50-100

Waterhazard class : *Water hazard class 1 (Self-assessment):* slightly hazardous for water.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant R-phrases

22 Harmful if swallowed.

Department issuing MSDS : Product safety department.

Contact : Product safety department

Abbreviations and acronyms :

ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Reglement internationale concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Sources

67/548/EEC - Dangerous Substances Directive

99/45/EEC - Dangerous Preparations Directive