



Coolant -38C PSA

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 10/01/2022 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name : Coolant -38C PSA
UFI : DC60-10HS-300E-NU3R
Product code : 838
Article number : 83800

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Professional use.
Function or use category : Antifreeze/Coolant

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

BARDAHL NL - OCD NEDERLAND BV
Maxwellstraat 41
3316 GP Dordrecht
Nederland
T 0031 78 651 2322 - F 0031 78 617 4848
mjkooijman@bardahl.nl - www.bardahl.nl

1.4. Emergency telephone number

Emergency number : +31 (0) 6 54924171
During office hours: 8.30 t/m 17:00 h

Country	Official advisory body	Address	Emergency number	Comment
	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Specific target organ toxicity – Repeated exposure, Category 2 H373
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) : Warning
Contains : 1,2-ethanediol
Hazard statements (CLP) : H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P260 - Do not breathe dust, fume, gas, mist, spray, vapours.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P330 - Rinse mouth.
P501 - Dispose of contents/container in accordance with local regulations.

2.3. Other hazards

PBT: not relevant – no registration required

vPvB: not relevant – no registration required

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2-ethanediol	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816-28	12.5 – 25	Acute Tox. 4 (Oral), H302 STOT RE 2, H373

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In any case of doubt or if symptoms can be observed, get medical attention. Never give anything by mouth to an unconscious person.
First-aid measures after inhalation : Allow affected person to breathe fresh air. If you feel unwell, seek medical advice.
First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. If skin irritation occurs: Get medical advice/attention. Remove contaminated clothing immediately.
First-aid measures after eye contact : Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice.
First-aid measures after ingestion : Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

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4.3. Indication of any immediate medical attention and special treatment needed

Call a POISON CENTER/doctor.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Powder. Alcohol resistant foam. Water haze.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : At high temperature may liberate toxic gases.

5.3. Advice for firefighters

Protection during firefighting : Use self-contained breathing apparatus. Wear suitable protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Wear proper protective equipment. See Heading 8.

6.1.1. For non-emergency personnel

Emergency procedures : Keep public away from danger area. Ventilate area.

6.1.2. For emergency responders

Protective equipment : Wear proper protective equipment.
Emergency procedures : Eliminate ignition sources.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel).
Other information : Stop leak without risks if possible.

6.4. Reference to other sections

See Headings 7 and 8. See Heading 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Ensure adequate ventilation. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in original container. Store in a dry, cool and well-ventilated place. Keep container tightly closed.
Incompatible materials : heat. Direct sunlight.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

1,2-ethanediol (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Ethylene glycol
IOEL TWA	52 mg/m ³
IOEL TWA [ppm]	20 ppm
IOEL STEL	104 mg/m ³
IOEL STEL [ppm]	40 ppm
Remark	Skin

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Protective goggles.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection			
Type	Field of application	Characteristics	Standard
Eye protection should only be necessary where liquid could be splashed or sprayed			

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing. EN ISO 13688

Hand protection:

Wear suitable gloves resistant to chemical penetration. Selection of the glove material on consideration of the penetration times, permeability and degradation. Refer to manufacturer's information.

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Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Safety gloves	Latex, Neoprene rubber (HNBR), Polyvinylchloride (PVC), Nitrile rubber (NBR)				

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

The usual precautionary measures are to be adhered to when handling chemicals. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: characteristic.
Odour threshold	: No data available
pH	: 8.25 – 8.4
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -18 °C
Freezing point	: No data available
Boiling point	: 180 °C
Flash point	: 120 °C Pensky-Martens CC

Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20°C	: > 1
Relative density	: 1.1
Density	: 1.134 g/cm ³
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: No data available
Explosive limits	: 3.2 – 53 vol %

9.2. Other information

Additional information	: Material is hygroscopic
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SECTION 10: Stability and reactivity

10.1. Reactivity

May react with: Strong acids. Chlorates. Nitrates. Peroxides.

10.2. Chemical stability

No decomposition if used according to specifications.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong oxidizers. Strong acids. Chlorates. Nitrates. Peroxides.

10.6. Hazardous decomposition products

Aldehyde. ketones.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

1,2-ethanediol (107-21-1)	
LD50 oral rat	7712 mg/kg
LD50 dermal rabbit	9530 mg/kg
LC50 Inhalation - Rat	> 2.5 mg/l

Skin corrosion/irritation : Based on available data, the classification criteria are not met
pH: 8.25 – 8.4

Serious eye damage/irritation : Based on available data, the classification criteria are not met
pH: 8.25 – 8.4

Respiratory or skin sensitisation : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Based on available data, the classification criteria are not met

Carcinogenicity : Based on available data, the classification criteria are not met

1,2-ethanediol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1000 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	1000 mg/kg bodyweight

Reproductive toxicity : Based on available data, the classification criteria are not met

STOT-single exposure : Based on available data, the classification criteria are not met

1,2-ethanediol (107-21-1)	
NOAEL (oral, rat)	200 mg/kg bodyweight
NOAEL (acute, oral, animal/female)	1000 mg/kg bodyweight

STOT-repeated exposure : Based on available data, the classification criteria are not met

1,2-ethanediol (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Based on available data, the classification criteria are not met

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SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

1,2-ethanediol (107-21-1)	
LC50 - Fish [1]	72860 mg/l
EC50 - Crustacea [1]	> 100 mg/l (24h)
EC50 - Other aquatic organisms [1]	6500 – 13000 mg/l (Algen)
NOEC chronic fish	15380 mg/l
NOEC chronic algae	8590 mg/l

12.2. Persistence and degradability

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Biodegradation	76 % (28d)

1,2-ethanediol (107-21-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	90 % (OECD 301D method)

12.3. Bioaccumulative potential

1,2-ethanediol (107-21-1)	
Partition coefficient n-octanol/water (Log Kow)	-1.36
Bioaccumulative potential	Low.

12.4. Mobility in soil

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Ecology - soil	Prevent entry to sewers and public waters.

1,2-ethanediol (107-21-1)	
Ecology - soil	High. Mobility in soil.

12.5. Results of PBT and vPvB assessment

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PBT: not relevant – no registration required	
vPvB: not relevant – no registration required	

Component	
1,2-ethanediol (107-21-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
European List of Waste (LoW) code : 16 01 14* - antifreeze fluids containing dangerous substances

SECTION 14: Transport information

In accordance with / / / ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

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REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

Abbreviations and acronyms:

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

ICAO: International Civil Aviation Organization

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
H302	Harmful if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.