

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

PROPYCOOL 20 UNCOLOURED/ CAN 25L / 26 KG

Version 2.0

Print Date 14.09.2018

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

1.1. Product identifier

Trade name : PROPYCOOL 20 UNCOLOURED/ CAN 25L / 26 KG

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

Use of the Substance/Mixture : Refrigerant

Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : Brenntag Nordic Oy
 Äyritie 16
 FI 01510 Vantaa
 Telephone : +358 9 5495 640
 Telefax : +358 9 5495 6411
 E-mail address : SDS.FI@brenntag-nordic.com

1.4. Emergency telephone number

Emergency telephone number : In case of personal injury call:
 Denmark: 82 12 12 12 Giftlinien, Bispebjerg Hospital
 Finland: Poison Information Centre: (09) 471 977 (direct) or (09) 47 11 (exchange), open 24h/day
 Norway: 22 59 13 00 Giftinformasjonen (døgnåpent)
 Sweden: +46-8-331231 Giftinformationscentralen (24 hour service)
 Outside these countries: Please call your local emergency services

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	Hazard category	Target Organs	Hazard statements

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Reproductive toxicity	Category 2	---	H361d
Serious eye damage	Category 1	---	H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

Most important adverse effects

Human Health	:	Suspected of damaging the unborn child. Causes serious eye damage. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Physical and chemical hazards	:	Strong heating may produce combustible vapours which can form explosive mixture with air.
Potential environmental effects	:	According to available data, this product is not harmful to the environment.

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008**


Hazard symbols	:	
Signal word	:	Danger
Hazard statements	:	H318 Causes serious eye damage. H361d Suspected of damaging the unborn child.
Precautionary statements	:	
Prevention	:	P280 Wear protective gloves/ eye protection/ face protection. P202 Do not handle until all safety precautions have been read and understood.
Response	:	P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. P308 + P313 IF exposed or concerned: Get medical advice/ attention.
Storage	:	P405 Store locked up.
Disposal	:	P501 Dispose of contents/ container in

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accordance with the local regulations.

Hazardous components which must be listed on the label:

 • Potassium 2-ethylhexanoate

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)	
		Hazard class / Hazard category	Hazard statements
Propane-1,2-diol			
CAS-No. : 57-55-6	≥ 90	---	---
EC-No. : 200-338-0			
EU REACH- : 01-2119456809-23-xxxx			
Reg. No.			
Potassium 2-ethylhexanoate			
CAS-No. : 3164-85-0	< 5	Skin Irrit.2 Eye Dam.1 Repr.2	H315 H318 H361d
EC-No. : 221-625-7			
EU REACH- : 01-2119989496-14-xxxx			
Reg. No.			

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

If inhaled	: Remove to fresh air. Give oxygen. If symptoms persist, call a physician.
In case of skin contact	: Wash off immediately with soap and plenty of water.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. Remove contact lenses. Call a physician immediately.
If swallowed	: Clean mouth with water and drink afterwards plenty of water.

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Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If symptoms persist, call a physician.

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

Symptoms : See Section 11 for more detailed information on health effects and symptoms.

Effects : See Section 11 for more detailed information on health effects and symptoms.

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

Treatment : No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting : Combustible Liquids, Strong heating may produce combustible vapours which can form explosive mixture with air.

5.3. Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further advice : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Cool closed containers exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : For personal protection see section 8.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Methods and materials for : Contain spillage, and then collect with non-combustible

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containment and cleaning up : absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Provide sufficient air exchange and/or exhaust in work rooms. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity. Pregnant and nursing women may not be exposed to the product. Take in consideration the national regulation.

Hygiene measures : Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep away from heat and sources of ignition. Protect against light. Keep container tightly closed in a dry and well-ventilated place.

Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.

Advice on common storage : Incompatible with oxidizing agents.

7.3. Specific end use(s)

Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other Occupational Exposure Limit Values

(Additional) Information : Contains no substances with occupational exposure limit values.

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Provide for good ventilation. Mechanical ventilation can be needed.

Keep the containers closed so far as possible. Place of work and method of working give final shape to avoid direct contact to the product

Personal protective equipment*Respiratory protection*

Advice : In case of insufficient ventilation, wear suitable respiratory equipment.
Recommended Filter type:A

Hand protection

Advice : Wear suitable gloves.
The glove material has to be impermeable and resistant to the product / the substance / the preparation.
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Material : Nitrile rubber
Break through time : ≥ 8 h
Glove thickness : 0,35 mm

Material : butyl-rubber
Break through time : ≥ 8 h
Glove thickness : 0,5 mm

Eye protection

Advice : Tightly fitting safety goggles

Skin and body protection

Advice : Wear suitable protective clothing.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

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Form	: viscous liquid
Colour	: colourless
Odour	: slight
Odour Threshold	: no data available
pH	: 7,5 - 10
Freezing point/range	: ca. -35 °C 50% solution ca. -15 °C 33% solution
Boiling point/boiling range	: ca. 170 °C
Flash point	: ca. 110 °C
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: 0,2 hPa (25 °C)
Relative vapour density	: no data available
Density	: 1,045 g/cm ³ (20 °C)
Water solubility	: completely soluble
Partition coefficient: n-octanol/water	: log Kow -1
Auto-ignition temperature	: > 370 °C
Thermal decomposition	: no data available
Viscosity, dynamic	: 55 mPa.s (25 °C)
Explosivity	: no data available
Oxidizing properties	: no data available

9.2. Other information

No further information available.

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

Advice : Stable under recommended storage conditions.

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10.2. Chemical stability

Advice : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : No information available.

10.4. Conditions to avoid

Conditions to avoid : No information available.

10.5. Incompatible materials

Materials to avoid : Strong reducing agents

10.6. Hazardous decomposition products

Hazardous decomposition products : No information available.

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Data for the product
Acute toxicity
Oral

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea., The product contains Potassium 2-ethylhexanoate which in animal experiments (oral/ingestion rat) in high concentrations has caused teratogenic effects.

Inhalation

May cause headache and dizziness.

Dermal

Please find this information in the listing of the component/components below in this section.

Irritation
Skin

Result : Prolonged skin contact may cause skin irritation.
The product may be absorbed through the skin.

Eyes

Result : Splash in the eyes may cause discomfort.

Sensitisation

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Result : Please find this information in the listing of the component/components below in this section.

CMR effects
CMR Properties

Carcinogenicity : no data available

Mutagenicity : no data available

Reproductive toxicity : Suspected of damaging the unborn child.

Specific Target Organ Toxicity
Single exposure

Remarks : No information available.

Repeated exposure

Remarks : No information available.

Other toxic properties
Repeated dose toxicity

no data available

Aspiration hazard

No information available.,

Component: **Propane-1,2-diol** **CAS-No. 57-55-6**

Acute toxicity
Oral

LD50 Oral : 22000 mg/kg (Rat, male and female)

Inhalation

LC50 : > 317042 mg/l (Rabbit; 2 h; dust/mist)

Dermal

LD50 Dermal : > 2000 mg/kg (Rabbit)

Sensitisation

Result : Does not cause skin sensitisation. (Maximisation Test; Guinea pig) (OECD Test Guideline 406)

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Component:	Potassium 2-ethylhexanoate	CAS-No. 3164-85-0
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Acute toxicity
Oral

LD50	:	2400 - 3000 mg/kg (Rat) Read-across (Analogy)
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Dermal

LD50	:	> 2000 mg/kg (Rat, male and female) (OECD Test Guideline 402) Read-across (Analogy)
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Sensitisation

Result	:	not sensitizing (Maximisation Test; Dermal; Guinea pig) (OECD Test Guideline 406)
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CMR effects
CMR Properties

Carcinogenicity	:	Study scientifically not justified.
Mutagenicity	:	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects
Reproductive toxicity	:	The results of animal studies suggest a fertility impairing effect.

SECTION 12: Ecological information
12.1. Toxicity

Component:	Propane-1,2-diol	CAS-No. 57-55-6
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Acute toxicity
Fish

LC50	:	40613 mg/l (Oncorhynchus mykiss (rainbow trout); 96 h) (static test; OECD Test Guideline 203)
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Toxicity to daphnia and other aquatic invertebrates

LC50	:	18340 mg/l (Ceriodaphnia dubia (water flea); 48 h) (static test; OECD Test Guideline 202)
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algae

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ErC50 : 19000 mg/l (Pseudokirchneriella subcapitata (green algae); 96 h)
(static test; End point: Growth rate; OECD Test Guideline 201)

Bacteria

NOEC : > 20000 mg/l (Pseudomonas putida; 18 h)

Chronic toxicity

Aquatic invertebrates

NOEC 13020 mg/l (Ceriodaphnia dubia (water flea); 7 d) (semi-static test;
End point: Reproduction)

Component:	Potassium 2-ethylhexanoate	CAS-No. 3164-85-0
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Acute toxicity

Fish

|| LC50 : > 100 mg/l (Oryzias latipes (Orange-red killifish); 96 h) (OECD Test
Guideline 203)Read-across (Analogy)

Toxicity to daphnia and other aquatic invertebrates

|| EC50 : 910 mg/l (Daphnia magna (Water flea); 48 h) (OECD Test
Guideline 202)Read-across (Analogy)

algae

|| EC50 : 49,3 mg/l (Desmodesmus subspicatus; 72 h) (static test; End point:
Growth rate; DIN 38412)Read-across (Analogy)

Chronic toxicity

Aquatic invertebrates

|| NOEC 25 mg/l (Daphnia magna (Water flea); 21 d) (semi-static test; End
point: Reproduction; OECD Test Guideline 211)Read-across
(Analogy)

12.2. Persistence and degradability

Component:	Propane-1,2-diol	CAS-No. 57-55-6
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Persistence and degradability
Biodegradability

- Result : 81 % (anaerobic; Exposure Time: 28 d)(OECD Test Guideline 301F) Readily biodegradable. The 10 day time window criterion is fulfilled.
- Result : 96 % (Exposure Time: 64 d)(OECD Test Guideline 306)

Component:	Potassium 2-ethylhexanoate	CAS-No. 3164-85-0
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Persistence and degradability
Biodegradability

- Result : 99 % (aerobic; activated sludge; Related to: Dissolved organic carbon (DOC); Exposure Time: 28 d)(OECD Test Guideline 301E) Readily biodegradable. Read-across (Analogy)
- Result : 90,1 % (aerobic; activated sludge; Related to: Dissolved organic carbon (DOC); Exposure Time: 7 d)(OECD Test Guideline 301E) Read-across (Analogy)

12.3. Bioaccumulative potential

Component:	Propane-1,2-diol	CAS-No. 57-55-6
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Bioaccumulation

- Result : log Kow -1,07 (20,5 °C) (OECD Test Guideline 107)
- Result : BCF: 0,09 The product has low potential bioaccumulation.

Component:	Potassium 2-ethylhexanoate	CAS-No. 3164-85-0
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Bioaccumulation

- Result : Not expected to be bioaccumulative

12.4. Mobility in soil
Data for the product
Mobility

- Result : The product is water soluble.

12.5. Results of PBT and vPvB assessment
Data for the product
Results of PBT and vPvB assessment

- Result : no data available

PROPYCOOL 20 UNCOLOURED/ CAN 25L / 26 KG**12.6. Other adverse effects****Data for the product****Additional ecological information**

Result : Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

- Product : Eliminate waste in conditions authorized by the regulations. Store waste in containers provided for this purpose. Do not dump in drains, water sheets or the ground.
- Contaminated packaging : Dispose of contaminated packaging in the same way as the product.
- European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Data for the product

Other regulations : Pregnant and nursing women may not be exposed to the product. Take in consideration the national regulation. Only persons, who are thoroughly instructed in the dangerous properties and the necessary safety precautions of the substance, are allowed to work with it.

As a principal rule, persons under 18 years are not allowed to work with this substance.

15.2. Chemical safety assessment

no data available

SECTION 16: Other information
Full text of H-Statements referred to under sections 2 and 3.

H315	Causes skin irritation.
H318	Causes serious eye damage.
H361d	Suspected of damaging the unborn child.

Abbreviations and Acronyms

BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
LC50	median lethal concentration

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LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
PBT	persistent, bioaccumulative and toxic
REACH Auth. No.	REACH Authorisation Number
REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
PNEC	predicted no-effect concentration
STOT	specific target organ toxicity
SVHC	substance of very high concern
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
vPvB	very persistent and very bioaccumulative

Key literature references : Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Methods used for product classification : The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.

Hints for trainings : The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.

|| Indicates updated section.

The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship.

The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.