

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

ONNLIN ETYCOOL / DR 208L / 230 KG

Version 5.0

Print Date 27.06.2024

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

1.1. Product identifier

Trade name : ONNLIN ETYCOOL / DR 208L / 230 KG

UFI : 1UE5-311Q-K00H-8DHR

UFI code notified in : Denmark, Finland, Norway, Sweden

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 : fi-sds@brenntag.com

1.4. Emergency telephone number

Emergency telephone number : In case of personal injury call:
Denmark: +45 82 12 12 12 Giftlinien, Bispebjerg Hospital
Finland: +358 9 471 977 Finnish Poison Information Center (24 h/day)
Norway: +47 22 59 13 00 Giftinformasjonen (døgnåpent)
Sweden: +46-8-33 70 43 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

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Hazard class	Hazard category	Target Organs	Hazard statements
Acute toxicity (Oral)	Category 4	Kidney	H302
Specific target organ toxicity - repeated exposure (Oral)	Category 2	Kidney	H373



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

Most important adverse effects

Human Health	:	Contains organic solvent. Splash in the eyes may cause discomfort. Harmful if swallowed. Kidney
Physical and chemical hazards	:	Stable under normal conditions.
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	:	Warning
Hazard statements	:	H302 Harmful if swallowed. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements		
Prevention	:	P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash the contact area thoroughly after handling. P270 Do not eat, drink or smoke when using this product.
Response	:	P314 Get medical advice/ attention if you feel unwell. P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

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Disposal : P501 Dispose of contents/ container in accordance with the local regulations.

Hazardous components which must be listed on the label:

- ethanediol

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)	
		Hazard class / Hazard category	Hazard statements
ethanediol			
Index-No. : 603-027-00-1	> 75	Acute Tox.4 Oral STOT RE2	H302
CAS-No. : 107-21-1			H373
EC-No. : 203-473-3			
EU REACH- : 01-2119456816-28-xxxx			Acute toxicity estimate
Reg. No.			Acute oral toxicity: 500 mg/kg Acute dermal toxicity: 3500,01 mg/kg
Methyl-1H-benzotriazole			
CAS-No. : 29385-43-1	<= 0,15	Acute Tox.4 Oral Repr.2 Oral Aquatic Chronic2	H302
EC-No. : 249-596-6			H361d
EU REACH- : 01-2119979081-35-xxxx			H411
Reg. No.			Acute toxicity estimate
			Acute oral toxicity: 720 mg/kg

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

ONNLINE ETYCOOL / DR 208L / 230 KG**SECTION 4: First aid measures****4.1. Description of first aid measures**

General advice	: Remove from exposure, lie down. If breathing is irregular or stopped, administer artificial respiration. Take off all contaminated clothing immediately. Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours.
If inhaled	: Remove to fresh air. Consult a physician.
In case of skin contact	: Wash off immediately with soap and plenty of water.
In case of eye contact	: Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting - seek medical advice.

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.
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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.
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5.3. Advice for firefighters

Special protective	: In the event of fire, wear self-contained breathing apparatus.
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equipment for firefighters
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. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Stop the leakage if it can be done without danger. Keep people away from and upwind of spill/leak. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Further information : Danger of slipping if spilled

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 for good ventilation. Mechanical ventilation can be needed.

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. To be stored separately from incompatible substances. See section 10.

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7.3. Specific end use(s)

Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Component:	ethanediol	CAS-No. 107-21-1
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Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL		
Workers, Long-term - local effects, Inhalation	:	35 mg/m ³
DNEL		
Workers, Long-term - systemic effects, Skin contact	:	106 mg/kg bw/day
DNEL		
Consumers, Long-term - local effects, Inhalation	:	7 mg/m ³
DNEL		
Consumers, Long-term - systemic effects, Skin contact	:	53 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water	:	10 mg/l
Marine water	:	1 mg/l
Intermittent releases	:	10 mg/l
Sewage treatment plant (STP)	:	199,5 mg/l
Fresh water sediment	:	20,9 mg/kg
Soil	:	1,53 mg/kg

Other Occupational Exposure Limit Values

Finland. Workplace Exposure Limits, as amended, Short Term Exposure Limit (STEL):
40 ppm, 100 mg/m³
Known Harmful Concentration (Liite 1).

Finland. Workplace Exposure Limits, as amended, Time Weighted Average (TWA):
20 ppm, 50 mg/m³
Known Harmful Concentration (Liite 1).

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Finland. Workplace Exposure Limits, as amended, Skin designation:
Can be absorbed through the skin.

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA):
20 ppm, 52 mg/m³
Indicative

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Short Term Exposure Limit (STEL):
40 ppm, 104 mg/m³
Indicative

Component:	Methyl-1H-benzotriazole	CAS-No. 29385-43-1
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Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL		
Workers, Long-term - systemic effects, Inhalation	:	21,2 mg/m ³
DNEL		
Workers, Long-term - systemic effects, Skin contact	:	0,3 mg/kg bw/day
DNEL		
Consumers, Long-term - systemic effects, Inhalation	:	350 µg/m ³
DNEL		
Consumers, Long-term - systemic effects, Skin contact	:	0,01 mg/kg bw/day
DNEL		
Consumers, Long-term - systemic effects, Ingestion	:	0,01 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water	:	0,008 mg/l
Marine water	:	20 µg/l
Intermittent releases	:	0,086 mg/l
Sewage treatment plant (STP)	:	39,4 mg/l
Fresh water sediment	:	0,117 mg/kg dry weight (d.w.)
Marine sediment	:	0,292 mg/kg dry weight (d.w.)
Soil	:	0,0187 mg/kg dry weight (d.w.)

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Provide for good ventilation. Mechanical ventilation can be needed.

Possibility to wash the eye at the place of work.

Keep the containers closed as 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 : Protective gloves should be replaced at first signs of wear.
Choose right chemical protection as:
Neoprene gloves
Rubber gloves
Nitrile rubber
PVC

Eye protection

Advice : Safety glasses

Skin and body protection

Advice : Protective work clothing

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

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

Form	:	viscous liquid
Physical state	:	liquid
Colour	:	yellow
Odour	:	slight
Odour Threshold	:	No data available

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Freezing point/range	:	ca. -38 °C 50% solution
		ca. -18 °C 33% solution
Boiling point/boiling range	:	> 165 °C
Flammability	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	> 100 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Self-Accelerating decomposition temperature (SADT)	:	No data available
pH	:	7,5 - 10,0 Concentration: 100 %
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Flow time	:	No data available
Solubility(ies)		
Water solubility	:	completely soluble
Solubility in other solvents	:	No data available
Dissolution Rate	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Dispersion Stability	:	No data available
Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	ca. 1,13 g/cm ³ (20 °C)

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Bulk density : No data available

Relative vapour density : No data available

Particle characteristics
No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : Stable under recommended storage conditions.

10.2. Chemical stability

Advice : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : May react with strong acids and strong oxidizing agents.

10.4. Conditions to avoid

Conditions to avoid : No information available.

10.5. Incompatible materials

Materials to avoid : Strong acids, Chlorates, nitrates, Peroxides

10.6. Hazardous decomposition products

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as: Aldehydes, Ketones

SECTION 11: Toxicological information

11.1. Information on the hazard classes within the meaning of Regulation (EC) No. 1272/2008

Data for the product

Acute toxicity

Oral

Acute toxicity estimate : ca. 540 mg/kg) (Calculation method)

Harmful if swallowed., May cause dizziness, nausea, gastric pain, muscle weakness and unconsciousness. Kidney disease may occur. There is even a risk for liver disease and brain damage.

Inhalation

May cause headache and dizziness.

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Dermal

No data available

Irritation

Skin

Result : Prolonged skin contact may cause skin irritation.

Eyes

Result : Splash in the eyes may cause discomfort.

Sensitisation

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

CMR effects

CMR Properties

Carcinogenicity : Please find this information in the listing of the component/components below in this section.
 Mutagenicity : Please find this information in the listing of the component/components below in this section.
 Reproductive toxicity : Please find this information in the listing of the component/components below in this section.

Specific Target Organ Toxicity

Single exposure

Remarks : No data available

Repeated exposure

Remarks : May cause damage to organs through prolonged or repeated exposure.

Other toxic properties

Repeated dose toxicity

No data available

Aspiration hazard

No data available

Further information

Experience with human exposure : Contains organic solvent.,

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Component:	ethanediol	CAS-No. 107-21-1
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Acute toxicity

Inhalation

LC50 : > 2,5 mg/l (Rat; 6 h; dust/mist)

Dermal

LD50 : > 3500 mg/kg (Mouse, male and female)

Sensitisation

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

CMR effects

CMR Properties

Carcinogenicity : Animal testing did not show any carcinogenic effects.
 Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
 Animal testing did not show any mutagenic effects.
 Teratogenicity : Ingestion of excessive amounts by pregnant animals resulted in maternal and foetal toxicity.
 Reproductive toxicity : Animal testing did not show any effects on fertility.

11.2. Information on other hazards

Data for the product

Endocrine disrupting properties

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1. Toxicity

Component:	ethanediol	CAS-No. 107-21-1
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Acute toxicity

Fish

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LC50 : 72.860 mg/l (Pimephales promelas; 96 h) (static test; EPA OPP 72-1)

Toxicity to daphnia and other aquatic invertebrates

EC50 : > 100 mg/l (Daphnia magna; 48 h) (OECD Test Guideline 202)

algae

EC50 : 6500 - 13000 mg/l (Selenastrum capricornutum; 96 h) (End point: Growth rate)

12.2. Persistence and degradability

Component:	ethanediol	CAS-No. 107-21-1
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Persistence and degradability

Biodegradability

Result : 90 - 100 % (aerobic; activated sludge; 53 mg/l; Related to: Dissolved organic carbon (DOC); Exposure Time: 10 d)(OECD Test Guideline 301A)Readily biodegradable.

12.3. Bioaccumulative potential

Component:	ethanediol	CAS-No. 107-21-1
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Bioaccumulation

Result : log Kow ca. -1,36 (23 °C) ((calculated))
: Bioaccumulation is not expected.

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

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Result : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Endocrine disrupting properties**Data for the product**

Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. 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 or ID number

Not applicable.

14.2. UN proper shipping name

Not applicable.

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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.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Data for the product

Other regulations : Exposure limits in accordance to local regulations
As a principal rule, persons under 18 years are not allowed to work with this substance.
Only persons, who are thoroughly instructed in the dangerous properties and the necessary safety precautions of the substance, are allowed to work with it.

15.2. Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Full text of the Notes referred to under section 3.

ONNLINE ETYCOOL / DR 208L / 230 KG**Abbreviations and Acronyms**

AU AIICL	Australia. Industrial Chemicals Act (AIIC) List
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
DSL	Canada. Environmental Protection Act, Domestic Substances List
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ENCS (JP)	Japan. Kashin-Hou Law List
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IECSC	China. Inventory of Existing Chemical Substances
INSQ	Mexico. National Inventory of Chemical Substances
ISHL (JP)	Japan. Inventory of Industrial Safety & Health
KECI (KR)	Korea. Existing Chemicals Inventory
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NDSL	Canada. Environmental Protection Act. Non-Domestic Substances List
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
NZIOC	New Zealand. Inventory of Chemicals
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
ONT INV	Canada. Ontario Inventory List
PBT	persistent, bioaccumulative and toxic
PHARM (JP)	Japan. Pharmacopoeia Listing
PICCS (PH)	Philippines. Inventory of Chemicals and Chemical Substances
PNEC	predicted no-effect concentration
REACH Auth. No.:	REACH Authorisation Number

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REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
UK REACH Auth. No.:	UK REACH Authorisation Number
UK REACH AuthAppC. No.	UK REACH Authorisation Application Consultation Number
UK REACH-Reg.No	UK REACH Registration Number
STOT	specific target organ toxicity
SVHC	substance of very high concern
TCSI	Taiwan. Existing Chemicals Inventory
TH INV	Thailand. Existing Chemicals Inventory from FDA
TSCA	US. Toxic Substances Control Act
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
VN INVL	Vietnam. National Chemical Inventory
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.