

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Kylarvätska OAT koncentrerad

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

Antifreeze fluid, concentrated

1.3 Details of the supplier of the safety data sheet

Supplier

Agro Oil Box 30192 104 25 Stockholm, Sweden Telephone +46 (0)10-556 00 00 E-mail info@agrol.se

1.4 Emergency telephone number

010-456 67 00 (Open 24/7) 112 (Ask for the Posion Centre)
09-471 977 (Open 24/7) 112 (Ask for the Poison Centre)
22 59 13 00 (Open 24/7) 113 (Ask for the Poison Centre)

SECTION 2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Acute Tox. 4, H302 STOT RE 2, H373 Eye Irrit.2, H319

2.2 Label elements

Hazard pictograms





Signal word

WARNING

Contains Ethane-1,2-diol

Hazard statements

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H373	May cause damage to organs (kidney) through prolonged or repeated exposure.

Precautionary statements

P102	Keep out of reach of children.
P260	Do not breathe dust/fume/ gas/mist/vapours/spray.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P501	Dispose of contents/container to approved waste disposal facility in accordance with local regulations

2.3 Other hazards

Ethane-1,2-diol can easily be absorbed through the skin.

SECTION 3. COMPOSITION/INFORMATION OM INGREDIENTS

3.2 Mixtures

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

Name	EC no.	CAS no.	REACH reg no.	% (w/w)	Hazard statements
Ethane-1,2-diol	203-473-3	107-21-1	01-2119456816- 28	50-100	Acute Tox. 4, H302 STOT RE 2, H373
Potassium 2- ethylhexanoate	221-625-7	3164-85-0	*	1-<3	Repr. 2, H361d Eye Dam, 1, H318 Skin Irrit. 2, H315

* Not available or REACH registration not required

Also contains denatonium benzoate (Bitrex) and colourant which does not affect the classification.

Other information

For a full text of hazard statements: see Section 16

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

After inhalation:Fresh air and rest. If difficulties in breathing get medical advice.After eye contact:Rinse the eyes gently with water for at least 15 minutes. Keep the eyelids wide apart,
remove contact lenses if present. If symptoms persist consult a doctor.After skin contact:Take off contaminated clothing. Wash skin with soap and waterAfter ingestion:Rinse mouth and drink water. Contact a doctor if experiencing symptoms.



4.2 Most important symptoms and effects, both acute and delayed

Inhalation:	The vapours may cause dizziness, drowsiness and headache, at high concentrations.
Eye:	Causes serious eye irritation.
Skin:	Causes degreasing. May cause mild skin irritation.
Ingestion:	Small amounts are not expected to produce any acute symptoms.
	Large amounts may cause nausea and vomiting. Repeated exposure through ingestion
	affects the kidneys and central nervous system and may cause headache, dizziness,
	nausea, vomiting, confusion and, in severe cases, unconsciousness.

4.3 Indication of any immediate medical attention and special treatment needed

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SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Can be extinguished using dry powder, foam, carbon dioxide or water fog. Unsuitable extinguishing media: Do not use direct water jet.

5.2 Special hazards arising from the substance or mixture

In case of fire, toxic and corrosive gases may develop.

5.3 Advice for firefighters

Precautions according to the standard procedure for chemical fires. Use water **only** to cool down containers that are exposed to fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes and skin.

6.2 Environmental precautions

Do not allow discharge to enter sewers, watercourses or the ground.

6.3 Methods and material for containment and cleaning up

Contain/absorb spillages with suitable absorbent material such as sand or active clay. Disposal of waste must be in accordance with national regulations.

6.4 Reference to other sections

See Section 8 for Exposure controls / personal protection and Section 13 for disposal considerations.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid prolonged or repeated contact with skin. Avoid inhalation of vapours, mist or fumes. Do not reuse soiled clothing unless laundered.



7.2 Conditions for safe storage, including any incompatibilities

Containers must be kept tightly closed and sealed, in a cool and dry place. The product is hygroscopic. Keep out of reach of children.

7.3 Specifik end use

See Section 1.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits according to National regulations

AFS 2018:1, Sweden

Substance	Cas nr	NGV	NGV	KTV	KTV	Note	Year
		ppm	mg/m3	ppm	mg/m3		
Ethane-1,2-diol	107-21-1	10	25	40	104	H, 26	2015

Note:

V: Indicative short-term limit value

26: The limit value applies to the total concentration of vapour and aerosol.

654/2020, Finland

Substance	Cas nr	HTP 8 hours				Note	Year
		ppm	mg/m3	ppm	mg/m3		
Ethane-1,2-diol	107-21-1	20	50	40	100	skin	2002

Note:

Skin: Substance where the significance of skin exposure can be very large given the total exposure.

Regulations concerning Action and Limit values, Norway

Name	Cas nr	ppm	mg/m3	Note	Last amended
Ethane-1,2-diol	107-21-1	20 40	52 104	HE S	2012

Note:

H, E: Chemicals that can be absorbed through the skin. The EU has adopted a recommended limit value for the substance.

S: The short-term exposure limit: the average concentration of a chemical substance in an employee's breathing zone that must not be exceeded over a given reference period. The reference period is 15 minutes.



Other information

DNEL:

Ethane-1,2- diol	Worker				Genera	al publ	ic	
		Long term exposure				Long tern	n expo	sure
	Syste	emic effects	Lo	Local effects		temic effects	L	ocal effects
Inhalation	-	mg/m ³	35	mg/m ³	-	mg/m ³	7	mg/m ³
Dermal	106	mg/kg	-	mg/kg	53	mg/kg	-	mg/kg

PNEC:

Ethane-1,2-diol	Freshwater:	10	mg/l
	Marine water:	1	mg/l
	Intermittent release:	10	mg/l
	Sediment (freshwater):	20,9	mg/kg
	Soil:	1,53	mg/kg
	Sewage treatment plant:	199,5	mg/l

8.2 Exposure controls

Appropriate technical measures

Ensure adequate ventilation. Methods are designed to prevent direct contact.

Personal protection

Respiratory protection:	Use respiratory protection when insufficient ventilation. Respiratory mask with filter A (brown).
Eye/face protection:	Wear eye protection (safety glasses with side shields or full face shield) when risk of splashing.
Skin protection:	Wear protective gloves (butyl rubber, nitrile, PVC or neoprene) and protective clothing.

Environmental exposure control

Prevent discharges into drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Yellow
Odour:	Mild
Melting point / freezing point:	-12 °C
Boiling point or initial boiling point and boiling range:	> 170 °C
Flammability:	The product is not classified as flammable but can ignite and maintain a fire.
Upper / lower flammability or explosive limits:	No information
Flash point:	> 111 °C
Auto-ignition temperature:	> 400 °C



Decomposition temperature: pH Kinematic viscosity: Solubility: Partition coefficient n-octanol/water: Vapour pressure Density and/or relative density: Relative vapour density: Particle characteristics: No information 7,5-9 No information Completely soluble in water log Pow -0,30 0,7 hPa (20 °C) 1,11 g/cm³ (20 °C) 2,1 (air = 1) Not relevant (liquid)

9.2 Other information

9.2.1. Information with regard to physical hazard classes Not relevant

9.2.2 Other safety characteristics

Not relevant

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

The product is not reactive under normal conditions.

10.2 Chemical stability

The product is stable under normal conditions.

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

None specific.

10.5 Incompatible materials

Avoid strong acids and bases.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11. TOXIKOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if swallowed

Ethane-1,2-diol

LC₅₀, inhalation, Rat, > 2,5 mg/l LD₅₀ dermal, Mouse: > 3500 mg/kg



Corrosive / irritating on the skin

Causes degreasing. May cause mild skin irritation. Ethane-1,2-diol can easily be absorbed through the skin.

Serious eye damage / irritation

Causes serious eye irritation.

Respiratory / skin sensitization

Not considered to be sensitizing.

Germ cell mutagenicity

Not considered to be cause mutations in germ cells.

Carcinogenicity

Not considered to be carcinogenic.

Toxic to reproduction

Not considered to be toxic to reproduction. Contains small amounts of Potassium 2-ethylhexanoate, which is suspected of harming the unborn child.

Specific organ toxicity-single exposure

The vapours may cause dizziness, drowsiness and headache, at high concentrations. Ingestion affects the kidneys and the central nervous system.

Specific organ toxicity-repeated exposure

May cause damage to organs (kidney) through prolonged or repeated exposure.

Aspiration Hazard

Not considered to be an aspiration hazard.

11.2 Information on other hazards

Endocrine disrupting properties

Based on available information, this mixture contains no substance which is identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100 or (EU) 2018/605 in concentrations $\geq 0.1\%$ (w/w).

SECTION 12. ECOLOGICAL INFORMATION

The product is not classified as hazardous to the environment.

12.1 Toxicity

Ethane-1,2-diol

LC₅₀, Fish, 96 h: 41 000 mg/l (Oncorhynchus mykiss) LC₅₀, Fish, 96 h: 14-18 mg/l (Oncorhynchus mykiss) EC₅₀, Daphnia, 48 h: 46 300 mg/l (Daphnia magna)

12.2 Persistence and degradability

Readily biodegradable Degradability: 90-100%, 10 d. (OECD TG 301 A) (Activated sludge, related to: chemical oxygen demand)

12.3 Bioaccumulative potential

Not considered bioaccumulative.

12.4 Mobility in soil

The product is soluble in water and is considered to be mobile in soil.



12.5 Results of PBT och vPvB assessment

Based on available information, this mixture contains no substance that meets the PBT or vPvB criteria according to Annex XIII to Regulation (EC) No. 1907/2006 (REACH).

12.6 Endocrine disrupting properties

Based on available information, this mixture contains no substance which is identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100 or (EU) 2018/605 in concentrations $\geq 0.1\%$ (w/w).

12.7 Other adverse efffects

None known.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Product residues, spills etc. are classified as hazardous waste. Disposal, transportation, storage and handling of the waste must be in accordance with national regulations. Product waste must not be allowed to contaminate soil or water, or released into the environment.

Prevent discharge into drains.

Classified as hazardous waste, with hazard class HP 5 (Specific Target Organ Toxicity (STOT)/Aspiration Toxicity)) och HP 6 (Acute Toxicity).

Suggested waste code (EWC): 16 01 14* antifreeze fluids containing dangerous substances.

Packaging

EWC-code: 15 01 02, Plastic packaging EWC-code: 15 01 04, Metallic packaging

Packaging containing product residues that are not drip dry must be handled as hazardous waste and disposed of properly sealed.

EWC-code: 15 01 10*, Packaging containing residues of or contaminated by hazardous substances.

SECTION 14. TRANSPORT INFORMATION

The product is not covered by the regulations for the transport of dangerous goods.

	ADR/RID	ADN	IMDG	IATA /ICAO
14.1 UN-number or ID number	N/A	N/A	N/A	N/A
14.2 UN proper shipping name	N/A	N/A	N/A	N/A
14.3 Transport hazard class	N/A	N/A	N/A	N/A



14.4 Packing group	N/A	N/A	N/A	N/A
14.5 Environmental hazards	N/A	N/A	N/A	N/A

14.6 Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15. REGULATORY INFORMATION

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

This safety data sheet is prepared in accordance with the EUROPEAN PARLIAMENT AND COUNCIL REGULATION (EC) No 1907/2006 of 18 December 2006 concerning the registration, evaluation, authorization and restriction of chemicals (REACH) and Commission Regulation (EU) No 2020/878 of 18 June 2020 amending the European Parliament and Council Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH).

Regulations

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substance and mixtures (CLP).

Commission Regulation (EU) No 1357/2014 of 18 December 2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste.

Sweden

AFS 2011:19, amended by AFS 2018:2 (Chemical risks at work) AFS 2018:1 (Occupational exposure limits) KIFS 2017:7 (Chemical products and Biotechnicological organisms Regulation)

Finland

654/2020 (Occupational exposure limits) 715/2001 (Chemical risks at work)

Norway

Regulations concerning the design and layout of workplaces and work premises (the Workplace Regulations)

Regulations concerning action and limit values for physical and chemical agents in the working environment and classified biological agents (Regulations concerning Action and Limit values)

Norwegian Product declaration number: 651020

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.



SECTION 16. OTHER INFORMATION

Please note! This safety data sheet is an English translation applicable for Sweden, Norway and Finland. A safety data sheet in local language is also available. Please refer to the Agro Oil webshop for safety data sheets in local languages. <u>https://webshop.agrol.se/</u>

Classification procedure

Test data is prioritized when classifying the product. When no test data are available the classification criteria in Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (CLP) have been used.

Hazard statements in Section 3

H302	Harmful if swallowed.			
H315	Causes skin irritation			
H318	Causes serious eye damage.			
H319	Causes serious eye irritation.			
H361d	Suspected of damaging the unborn child.			
H373	May cause damage to organs (kidney) through prolonged or repeated exposure.			
Abbreviations				
ADN	International Carriage of Dangerous Goods by Inland Waterways			
ADR	International Carriage of Dangerous Goods by Road			
BCF	Bio Concentration Factor			
BOD5/COD	Biological Oxygen Demand 5 days/Chemical Oxygen demand			
BOD (MITI)	Biological Oxygen Demand			
DNEL	Derived No Effect Level			
EC ₅₀	Effective Concentration (concentration that gives response in 50% of test subjects)			
ECHA	European Chemical Agency			
EmS	Emergency Schedule Information			
HTP	Exposure value, concentrations of impurities in workplace air known to be harmful.			
IARC	International Agency for Research on Cancer			
IATA/ICAO	IATA Dangerous goods regulation / ICAO Technical Instructions for the Safe Transport of			
	Dangerous Goods by Air			
IC ₅₀	Inhibitory Concentration (concentration that shows inhibition in 50% of the test subjects)			
IMDG	International Maritime Dangerous Goods Code			
KTV	Short term exposure values, normally 15 minutes			
LC ₅₀	Lethal Concentration (concentration causing the death of 50% of a group of test animals)			
LD ₅₀	Lethal Dose (dose causing the death of 50% of a group of test animals)			
Log Pow	Partition coefficient of octanol - water			
MITI	Ministry of International Trade and Industry, Japan			
NGV	Long term exposure value, normally 8 hours.			
NOEC	No Observed Effect Concentration			
NOAEC	No Observed Adverse Effect Concentration			
NOAEL	No Observed Adverse Effect Level			
OECD	Organisation for Economic Co-operation and Development			
PBT	Persistent Bio-accumulative and Toxic substance			
PNEC	Predicted No Effect Concentration			
RID	International Carriage of Dangerous Goods by Rail			
STEL	Short Term Exposure Limit			
SVHC	Substance of Very High Concern			
TWA	Time-weighted average			
vPvB	very Persistent and very Bioaccumulative			



Advice on education

The user of this product should have training that is relevant to the properties of the product and relevant use.

References

Information from the supplier: SDS in Swedish, 2021-08-24 Classification & Labelling Inventory Database, ECHA. Registered substances, ECHA.

Version description

The information has been modified under the following sections in the safety data sheet: 15, 16

The safety data sheet is dated 16.05.2022 and replaces the version dated 01.12.2021.