

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance or preparation

Frysskydd

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

Antifreeze agent

1.3 Details of the Supplier of the Safety Data Sheet

Supplier Agro
Oil Box
30192
104 25 Stockholm, Sweden
Phone +46 8-657 42 00
Fax +46 8-657 42 88
E-mail info@agrol.se

1.4 Emergency telephone number

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

2.1.1 Classification in accordance with 1272/2008

Flam. Liq. 1 H225, Eye Irrit. 2 H319, STOT SE 3 H336

2.2 Label elements



Danger

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P370/378 In case of fire: Use foam, dry chemical, carbon dioxide (CO₂), water spray or fog to extinguish.

P501 – Dispose of contents/container to authorize waste treatment plant in accordance with local regulations.

Contains: Ethanol, 2-propanol, 2-Butanone

2.3 Other Hazards

Flammable liquid, Class 1.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

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

Name	EG-no	CAS-no	Weight %	Classification
Ethanol	200-578-6	64-17-5	70-80	Flam. Liq. 1 225
2-propanol	200-661-7	67-63-0	15-25	Flam. Liq. 1 H225 Eye Irrit. 2 H319 STOT SE 3 H336
2-Butanone	201-159-0	78-93-3	1-3	Flam. Liq. 1 H225 Eye Irrit. 2 H319 STOT SE 3 H336 EUH 066
Iso Alcanes	927-285-2		1-3	Asp. tox 1; H304 EUH 066

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Fresh air and rest. Seek medical advice if symptoms persist.
Eye contact	Rinse immediately with plenty of water. Hold eyelids apart. Contact physician if irritation persists.
Skin contact	Immediately rinse with water. Remove soaked clothing and flush. Consult a physician if irritation persists
If swallowed	Rinse nose, mouth and throat with water. Immediately give two glasses of milk or water if victim is fully conscious. Contact physician if larger quantity has been consumed.

4.2 The most important symptoms and effects, both acute and delayed

Ingestion	May have an intoxicating effect, gives deterioration reactions, dizziness, nausea, and impaired consciousness in large quantities.
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5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media,

Use: Water spray or fog, alcohol resistant foam, carbon dioxide (CO₂)

Inappropriate extinguishing media: Straight streams of water

5.2 Special hazards arising from the substance or mixture

Vapors may form explosive mixtures with air and ignite.

5.3 Advice for firefighters

Cool containers exposed to flames with water until well after fire is out.

6.4 Reference to other sections

Information om exponering / personligt skydd och avfallshantering finns i avsnitt 8 och 13.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment according to section 8.

6.2 Environmental precautions

Prevent discharges to water and sewer.

6.3 Methods and materials for containment and cleaning up

Larger discharges should be banked with earth, sand or other inert material.

6.4 Reference to other sections

See Section 8 for personal safety equipment and section 13 for waste disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat, sparks and open flame. Protect against direct sunlight. Avoid eating, drinking and smoking when using the product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place. Store in a closed container. Keep away from heat, sparks and open flame. Store in a cool and well-ventilated place. Do not allow contact with air. Protect from moisture.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

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Substance	Cas no	Long-term exposure Limit (8-hr TWA reference period)		Short-term exposure limit (15 minute reference period)	
		ppm	mg/m3	ppm	mg/m3
Ethanol	64-17-5	1000	1920	-	-
2-propanol	67-63-0	400	999	500	1250
2-butanon	78-93-3	200	600	300	899

Reference: EH40/2005 Workplace exposure limits

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Eye wash equipment should be available at the workplace.

8.2.2 Personal protection equipment

Respiratory protection If necessary, use the respiratory mask. Gas filter type A.

Skin protection If necessary, use gloves. Eg Polyvinyl alcohol or polyvinyl chloride for short exposure (less than 1h)

Eye protection If risk of splashing wear safety glasses

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form Liquid

Colour Colourless

Density 790 kg/m3 (20°C)

Boiling point 78 °C

Flash point 12 °C

Explosion limits Lower: 3,3 vol-% -

Upper: 19 vol-%

Ignition point 363 °C

Vapour pressure 5,9 kPa

Solubility Water solubility 792100 mg/l

9.2 Other information

Values specified for ethanol

10. STABILITY AND REACTIVITY

10.1 Reactivity

The substance reacts strongly with several oxidizing agents

10.2 Chemical stability

No information

10.3 Possibility of hazardous reactions

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Vapor formed during heating is flammable

10.4 Conditions to avoid

Heating

10.5 Incompatible materials

Not applicable

10.6 Hazardous

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.1 Acute toxicity

Ingestion LD50 Rat: 7060 mg / kg bw (Ethanol)

Skin contact Dermal LD50 Rabbit: > 20000 mg / kg bw (Ethanol)

Inhalation LC50 Inhaled rat 4h: 124,7 mg/l (Ethanol)

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Name	Result	Species	Exponation
Ethanol	LC50 Fish 96h: 13500 mg/l	Pimephales promelas	96 h
	EC50 Daphnia 5400 mg/l	D. magna	48 h
	IC50 Algae >10,9 mg/l	Skeletonema costatum	72 h

12.2 Persistence and degradability

Name	Degradeability
Ethanol	BOD5/COD: 0,4 - 0,8 ; 85% degrades in 28 daysOECD 301D

12.3 Bioaccumulative potential

Name	LogP _{ow}	BCF
Ethanol	- 0,32	0,66

12.4 Mobility in soil

Ethanol is expected to have very high mobility in soil (KOC estimated to be 1)

12.5 Results of PBT and vPvB assessment

Not applicable

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12.6 Other adverse effects

No additional information

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Remains to be treated as hazardous waste, see regulation on hazardous waste.

Waste with a flash point <21 ° C is hazardous waste as H3-A

14. TRANSPORT INFORMATION

14.1 UN-number

1887

14.2 UN proper shipping name

Alcohols n.o.s

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14.3 Transport hazard class(es)

3 (ADR, IMDG, IATA)

14.4 Packing group

II (ADR, IMDG, IATA)

14.5 Environmental hazards

No

14.6 Special precautions for user

Caution, Flammable liquids

Kemler Number: 33

EMS Number: F-E, S-D

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

Not applicable

15. REGULATORY INFORMATION

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

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out

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16. OTHER INFORMATION

Risk Phrases in full text

H225 - Highly flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness.

EUH066 - Repeated exposure may cause skin dryness or cracking.