

SAFETY DATA SHEET



In accordance with 453/2010 and 1272/2008

(All references to EU regulations and directives are abbreviated into only the numeric term)

Issued 2014-03-04

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

1.1. Product identifier

Trade name PrestoGuard AB-30
Supplier's product number i40384

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

Identified uses Fire extinguishing agents

1.3. Details of the supplier of the safety data sheet

Company Presto Brandsäkerhet AB
Värmbolsvägen 2
Box 315
SE-64123 KATRINEHOLM
Sweden
Telephone +46 150-76000
E-Mail info@presto.se

Original manufacturer of this product

ORCHIDEE S.A.S, 72 Rue Caroline Follet F-f -, SE- 80160 CONTY, Sweden

1.4. Emergency telephone number

In case of emergency contact toxicological information, emergency tel 112 (within Europe) or 911 (for USA and Canada). For other countries, use the built-in emergency number in your cell phone

For non-emergency poison information, see <http://www.who.int/ipcs/poisons/centre/directory/euro/en/>

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification in accordance with 1272/2008

Acute toxicity (Category 4 oral)

Classification in accordance with 1999/45/EG

Harmful; Xn; R22.

2.2. Label elements

Label information in accordance with 1272/2008

Hazard pictograms



Signal words Warning

Hazard statements

H302 Harmful if swallowed

Precautionary statements

P264 Wash hands thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Label information in accordance with 1999/45/EG

See section 16.

2.3. Other hazards

Not relevant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is composed of a homogeneous aqueous solution.

3.2. Mixtures

Note that the table shows known hazards of the ingredients in a pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

ETHYLENE GLYCOL			
CAS No	107-21-1	Acute Tox <i>4oral</i> , STOT RE 2; H302, H373 Xn; R22	35 - 40%
EC No	203-473-3		
Index No	603-027-00-1		

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complement used in the calculation of the hazards of this mixture, see Section 16b
Also contains component(s) not necessary to label.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Generally

- Put the person in the three-quarters prone recovery position if he or she is unconscious or groggy.
- Never leave a injured person alone. Their condition may rapidly worsen, sometimes several hours after the poisoning.
- Never attempt to administer liquid, or anything else, to an unconscious person via the mouth.

Upon breathing in

- Let the injured person rest in a warm place with fresh air; If symptoms persist, call a doctor/physician.
- Artificial breathing with breathing bag or breathing apparatus. Do not attempt mouth-to-mouth or mouth-to-nose resuscitation.
- If needed give oxygen.

Upon contact with the eyes

- Immediately rinse with lukewarm water 15 - 20 minutes with eyes wide open; Transport the injured person to the hospital immediately.
- Remove solid particles.
- If possible immediately remove contact lenses.

Upon skin contact

- Remove contaminated clothes.
- Wash the skin with soap and water.
- If symptoms occur, contact a physician.

Upon ingestion

- First rinse the mouth thoroughly with a lot of water and SPIT OUT the water. Then drink at least 1/2 liter of water and call a doctor/physician. Do NOT induce vomiting.

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

Irritation. Used properly symptoms are rare. At high doses or in sensitive individuals, unspecific toxic symptom e.g. indisposition, vomiting, diarrhoea and general feeling of being ill may occur.

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

When contacting a physician, take this SDS with you.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Not applicable: the product is a fire extinguisher.

5.2. Special hazards arising from the substance or mixture

In case of fire, substances hazardous to health, or substances harmful in other respects, may be dispersed.

5.3. Advice for fire-fighters

Protective measures should be taken regarding other material at the site of the fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use recommended safety equipment, see section 8.

In case of spillage in protected water, call the emergency services immediately, tel. 112 (in Europe).

Avoid inhalation and exposure to skin and eyes.

Avoid emissions into soil, water or air.

6.2. Environmental precautions

Dam up the spillage to prevent it reaching street sewers or flowing into the ground.

Always contact the fire department when accidental spillage of this product occurs. Show this safety data sheet.

6.3. Methods and material for containment and cleaning up

Absorb the liquid with an inert adsorbent, Vermiculite, for example. Collect the material for disposal at a waste disposal facility.

Residues left behind after cleaning shall be treated as hazardous waste. For further information, contact the local authority sanitisation works. Present this safety data sheet.

6.4. Reference to other sections

For choice of gloves, see Section 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not inhale the fumes and avoid exposure to skin, eyes and clothing.

Keep out of reach of children and pets.

The product should be stored in a manner which prevents hazards to health and the environment. Avoid exposure to humans and animals and do not discharge the product in a sensitive environment.

Store tightly, in original packaging.

Do not eat, drink or smoke in premises where this product is stored.

Work in order to avoid spillage. If spillage does occur, address it immediately in accordance with the directions specified in Section 6 of this safety data sheet.

Store in a well-ventilated space.

7.2. Conditions for safe storage, including any incompatibilities

Stored between -30 ° C and 50 ° C.

Eye-rinsing facilities shall be available at the workplace.

7.3. Specific end uses

Not relevant.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. National limit values, United Kingdom

ETHYLENE GLYCOLE

Time-weighted-average exposure limit (TWA) 20 ppm / 52 mg/m³ Short term exposure limit (STEL) 40 ppm / 104 mg/m³

Other ingredients (cf. Section 3) have no occupational exposure limit values.

8.2. Exposure controls

In terms of minimizing risks, attention must be paid to the health hazards (see Sections 2, 3 and 10) of this product or any of its ingredients according to EU directives 89/391 and 98/24 and national occupational legislation.

Eye protection should be worn if there is any danger of direct exposure or splashing.

Use protective gloves of butyl rubber, Viton or fluorine rubber, or get advice from an occupational medical expert about alternative materials. Show this safety data sheet.

Work without protective gloves should only occur when very small amounts are handled.



Choose a mechanical wear strength in line with the nature of the work in accordance to this pictogram with four digits that indicate resistance against abrasion, cutting effects, tear and puncture, where 1 is the lowest and 4 or 5 is the best.

Protect all exposed skin from coming into contact with the product.

For limitation of environmental exposure, see Section 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Appearance	Form: liquid Colour: blue
b) Odour	Not applicable
c) Odour threshold	Not applicable
d) pH	Not applicable
e) Melting point/freezing point	-35 °C
f) Initial boiling point and boiling range	100 °C at atmospheric pressure (101325 Pa)
g) Flash point	Not applicable
h) Evaporation rate	Not applicable
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Not applicable
k) Vapour pressure	Not applicable
l) Vapour density	Not applicable
m) Relative density	1,11 kg/L
n) Solubility	Solubility in water Unlimited solubility
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	Not applicable
q) Decomposition temperature	Not applicable
r) Viscosity	5 mm ² /s @ 20 °C
s) Explosive properties	Not applicable
t) Oxidising properties	Not applicable

9.2. Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Protect from heat and direct sunlight.

10.5. Incompatible materials

Not indicated

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

General or unspecific toxicity

Note that the product is hazardous to health.

Acute effects

Not classified as an acutely toxic substance.

Sensibilisation

Eczema (atopical or unidentified) may occur.

Degreases the skin.

Corrosive and irritating effects

Not indicated

Synergism and antagonism

Enhances the risk of allergy for other substances.

Effect on judgement and other psychological effects

In high doses, influence on discernment or other mental states cannot be ruled out.

Effect on human microflora

Harmful effects on human micro-flora can not be ruled out.

Relevant toxicological properties

ETHYLENE GLYCOL

LD50 rabbit 24h > 2000 mg/kg dermal

LD50 rat 24h = 4700 mg/kg oral

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

ETHYLENE GLYCOL

LC50 Rainbow trout (*Oncorhynchus mykiss*) 96h > 18500 mg/L

EC50 Freshwater water flea (*Daphnia magna*) 24h > 74000 mg/L

This product consists of fairly easily degradable substances. Global effects may occur in case of very large discharge. Ecological effects may occur in the local environment.

12.2. Persistence and degradability

The product degrades in the natural environment.

12.3. Bioaccumulative potential

Neither this product, nor its contents, accumulates in nature.

12.4. Mobility in soil

The product is miscible with water and is therefore variable in soil and water.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Other adverse effects

Not indicated

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste handling for the product

The product is toxic or hazardous to health and any waste from it should therefore be considered dangerous, if it is not treated in order to eliminate this risk.

Also take local regulations for dealing with waste into account.

Cf. also national waste regulations.

Classification according to 2006/12

Recommended LoW-code: 07 06 04 Other organicsolvents, washing liquids and mother liquors.

Recycling of the product

Small quantities are not normally recycled. In the case of larger quantities, contact the distributor.

SECTION 14: TRANSPORT INFORMATION

This product is only supposed to be transported by road or railway and just the transport regulations ADR/RID thus apply. If other means of transport are to be used, contact the publisher of this safety data sheet.

14.1. UN number

Not classified as dangerous goods

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

SECTION 15: REGULATORY INFORMATION

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

Not applicable.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: OTHER INFORMATION

16a. Indication of where changes have been made to the previous version of the safety data sheet

Revisions of this document

This is the first version.

16b. Legend to abbreviations and acronyms used in the safety data sheet

Full texts for Hazard Class and Category Code mentioned in section 3

Acute Tox 4oral Acute toxicity (Category 4 oral)

STOT RE 2 STOT RE 2; Specific target organ toxicity - repeated exposure (Category 2)

Comprehensive definition of the hazards mentioned in Section 2

Acute Tox 4oral

ATE (acute toxicity estimate) 300-2000 mg/kg

Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

16c. Key literature references and sources for data

Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2014-03-18.

Where such data was lacking, on the second hand the documentation on which this official classification is based was used, e.g. IUCLID (International Uniform Chemical Information Database). On the third hand, information was used from reputable international chemical suppliers, and on the fourth hand from other available information, e.g. safety data sheets from other suppliers or information from non-profit associations, whereby the reliability of the source was judged by an expert. If, in spite of this, reliable information was not found, the hazards were judged by expert opinions based on the known properties of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

- | | |
|------------|--|
| 453/2010 | COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) |
| 1272/2008 | 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 |
| 1999/45/EG | DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations |
| 89/391 | COUNCIL DIRECTIVE (89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work |
| 98/24 | COUNCIL DIRECTIVE 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) |
| 2006/12 | DIRECTIVE 2006/12/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 April 2006 on waste |
| 1907/2006 | REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), |

establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC Annex I

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

The calculation of the hazards of this mixture has been performed as an evaluation by applying a weight of evidence determination using expert judgement in accordance with 1272/2008 Annex I, weighing all available information having a bearing on the determination of the hazards of the mixture, and in accordance with 1907/2006 Annex XI.

16e. List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements

Full text for risk phrases mentioned in section 3

R22 Harmful if swallowed

Full texts for hazard statements mentioned in section 3

H302 Harmful if swallowed

H373 May cause organs through prolonged or repeated exposure

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

Warning for misuse

This product can cause injuries if not used properly. The manufacturer, the distributor or the supplier are not responsible for adverse effects if the product is not handled in accordance with its intended use.

Other relevant information

Label information in accordance with 1999/45/EG

Hazard symbol



Harmful

R-phrases

R22 Harmful if swallowed

S-phrases

S24/25 Avoid contact with skin and eyes

S37 Wear suitable gloves

S46 If swallowed, seek medical advice immediately and show this container or label

Editorial information

This safety data sheet has been generated by the program KemRisk®, KemRisk Sweden AB, Teknikringen 10, SE-583 30 Linköping, Sweden.