SAFETY DATA SHEET



Issued 2019-01-17

Replaces issued SDS 2018-08-28

Version number 4.0



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

1.1. Product identifier

Trade name P Foam-30

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 64123 KATRINEHOLM

Sweden

Telephone +46 (0)10-45 20 000 E-mail info@presto.se

1.4. Emergency telephone number

Acute cases: Call 112, request poison information.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acute toxicity (Category 4 oral), H302

Specific target organ toxicity - repeated exposure (Category 2), H373

2.2. Label elements

Hazard pictogram



Signal word Warning

Hazard statements

H302 Harmful if swallowed

H373 May cause damage to organs (kidneys) through prolonged or repeated exposure

Precautionary statements

P260 Do not breathe gas, mist, vapours, or spray 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

P330 Rinse mouth

P501 Dispose of contents and container to authorised waste disposal facility

Supplemental hazard information

Contains: ETHYLENE GLYCOLE

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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

Constituent	Classification	Concentration
ETHYLENE GLYCOLE		
CAS No: 107-21-1 EC No: 203-473-3 Index No: 603-027-00-1	Acute Tox 4oral, STOT RE 2; H302, H373	30 - 50 %
PROPAN-2-OL		
CAS No: 67-63-0 EC No: 200-661-7 Index No: 603-117-00-0 REACH: 01-2119457558-25	Flam Liq 2, Eye Irrit 2, STOT SE 3 <i>drow</i> ; H225, H319, H336	0.1 - 3 %
UREA		
CAS No: 57-13-6 EC No: 200-315-5		0.3 - 2 %

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 complements used in the calculation of the classification of this mixture, see Section 16b.

SECTION 4: First aid measures

4.1. Description of first aid measures

Generally

In case of concern, or if symptoms occur, call a doctor/physician.

Upon breathing in

Allow the injured person to rest in a warm place with fresh air, if symptoms persist seek medical attention.

Upon eye contact

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor.

Upon skin contact

Remove contaminated clothes.

Wash the skin with soap and water.

If symptoms occur, contact a physician.

Upon ingestion

Drink water and if possible activated carbon.

If the injured is conscious, induce vomiting and seek medical advice (emergency tel 112).

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

Generally

The substance can easily be absorbed through the skin.

May cause damage to organs through prolonged or repeated exposure.

Upon ingestion

Note that the symptoms may be delayed.

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

When contacting a physician, take this SDS with you.

Contains ethylene glycol and/or diethylene glycol. May cause renal injury upon ingestion.

Early treatment with ethanol may eliminate toxic effects of ethylene glycol such as metabolic acidosis and kidney damage. A more effective intravenous antidote for physician uses is 4-methylpyrazaole, a potent inhibitor of alcohol dehydrogenases, which effectively blocks the formation of toxic metabolites of ethylene glycol. It has been used to decrease the metabolic consequences of ethylene glycol poisoning before metabolic acidosis coma, seizures, and renal failure have occured.

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

Produces fumes containing harmful gases (carbon monoxide and carbon dioxide) when burning, and, in case of incomplete combustion, aldehydes and other toxic, harmful, irritant or environmentally harmful substances.

5.3. Advice for fire-fighters

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

In case of fire use a respirator mask.

Wear full protective clothing.

Cool closed containers that were exposed to fire with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep unauthorized and unprotected people at a safe distance.

Do not inhale vapours and avoid contact with skin, eyes and clothes when cleaning up the spillage.

Ensure good ventilation.

Use a chemical protection suit when cleaning up large spills.

6.2. Environmental precautions

Not indicated.

6.3. Methods and material for containment and cleaning up

Small spills can be wiped up with a cloth or similar. Then flush the spill site with water. Larger spills should first be covered with sand or earth and then be collected. Collected material should be disposed according to Section 13.

6.4. Reference to other sections

See section 8 and 13 for personal protection equipment and disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

Wash your hands after using the product.

Use recommended safety equipment, see section 8.

Store this product separately from food items and keep it out of the reach of children and pets.

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.

Remove clothes which have been splattered.

Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

This product should be stored well out of reach of young children and kept safely apart from products intended for consumption.

Always use sealed and visibly labeled packages.

Keep well closed.

Store only in the original package.

7.3. Specific end uses

See identified uses in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters 8.1.1. National limit values ETHYLENE GLYCOLE

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 20 ppm (Vapour) / 52 mg/m³ (Vapour) / 10 mg/m³ (Particulates) Short term exposure limit (STEL) 40 ppm (Vapour) / 104 mg/m³ (Vapour) Note Sk

PROPAN-2-OL

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 400 ppm / 999 mg/m³ Short term exposure limit (STEL) 500 ppm / 1250 mg/m³

Explanations of abbreviations are given in Section 16b

DNEL

ETHYLENE GLYCOLE

	Type of exposure	Route of exposure	Value
Worker	Chronic	Dermal	106 mg/kg bw
	Systemic		
Worker	Chronic	Inhalation	35 mg/m ³
	Local		
Consumer	Chronic	Inhalation	7 mg/m ³
	Local		
Consumer	Chronic	Dermal	53 mg/kg bw
	Systemic		

PROPAN-2-OL

	Type of exposure	Route of exposure	Value
Consumer	Chronic	Inhalation	89 mg/m ³
	Systemic		
Worker	Chronic	Dermal	888 mg/kg
	Systemic		
Worker	Chronic	Inhalation	500 mg/m ³
	Systemic		
Consumer	Chronic	Oral	26 mg/kg
	Systemic		
Consumer	Chronic	Dermal	319 mg/kg
	Systemic		

UREA

	Type of exposure	Route of exposure	Value
Consumer	Chronic	Inhalation	125 mg/m ³
	Systemic		
Worker	Chronic	Dermal	580 mg/kg bw
	Systemic		
Worker	Acute	Inhalation	292 mg/m ³
	Systemic		
Worker	Acute	Dermal	580 mg/kg bw
	Systemic		
Worker	Chronic	Inhalation	292 mg/m ³
	Systemic		
Consumer	Acute	Oral	42 mg/kg bw
	Systemic		
Consumer	Acute	Inhalation	125 mg/m ³
	Systemic		
Consumer	Acute	Dermal	580 mg/kg bw
	Systemic		
Consumer	Chronic	Oral	42 mg/kg bw
	Systemic		
Consumer	Chronic	Dermal	580 mg/kg bw
	Systemic		

PNEC

ETHYLENE GLYCOLE

Environmental protection target PNEC value Fresh water 10 mg/L Freshwater sediments 20.9 mg/L Marine water 1 mg/L Soil (agricultural) 1.53 mg/L

PROPAN-2-OL

Environmental protection target PNEC value Fresh water 140.9 mg/l Freshwater sediments 552 mg/kg Marine water 140.9 mg/l Marine sediments 552 mg/kg Microorganisms in sewage treatment 2251 mg/l Soil (agricultural) 28 mg/kg

UREA

Environmental protection target PNEC value Fresh water 0.047 mg/L

8.2. Exposure controls

To prevent occupational risks the health hazards for this product or any of the ingredients should be taken into account (see sections 2, 3 and 11), according to EU Directive 89/391 and 98/24 and national jurisdiction for occupational risks.

8.2.1. Appropriate engineering controls

Use adequate ventilation.

Eye/face protection

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

Skin protection

Use protective gloves fulfilling the standard EN374 if there is a risk of direct contact.

If necessary, use gloves made of neoprene or nitrile (EN 374).

Respiratory protection

Use proper protective breathing equipment in case of insufficient ventilation.

8.2.3. Environmental exposure controls

Work with the product should take place in such a way that the product does not get into drains, waterways, soil and air.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a)	Appearance	Form: liquid. Colour: colourless to pale yellow.
b)	Odour	characteristic
c)	Odour threshold	Not indicated
d)	pH	5 - 8
e)	Melting point/freezing point	-31 °C
f)	Initial boiling point and boiling range	Not indicated
g)	Flash point	>60 °C
h)	Evaporation rate	Not indicated
i)	Flammability (solid, gas)	Not applicable
j)	Upper/lower flammability or explosive limits	Not indicated
k)	Vapour pressure	Not indicated
1)	Vapour density	Not indicated
m)	Relative density	1.05 - 1.15
n)	Solubility	Not indicated
o)	Partition coefficient: n-octanol/water	Not applicable
p)	Auto-ignition temperature	Not indicated
q)	Decomposition temperature	Not indicated
r)	Viscosity	3 - 6 cP
s)	Explosive properties	Not applicable

Not applicable

9.2. Other information

No data available

t) Oxidising properties

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

Reacts with oxidising agents.

10.4. Conditions to avoid

Protect from heat and direct sunlight.

10.5. Incompatible materials

Avoid contact with oxidizers.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Contains ethylene glycol and/or diethylene glycol. May cause renal in jury upon ingestion.

Acute toxicity

Harmful if swallowed.

ETHYLENE GLYCOLE

LD50 rabbit 24h: > 2000 mg/kg Dermally

LC50 rat 4h: > 2.5 mg/L Inhalation

LD50 rat 24h: 4700 mg/kg Orally

PROPAN-2-OL

LD50 rabbit 24h: 15800 mg/kg Dermally LD50 rat 24h: > 12800 mg/kg Dermally LC50 rat 4h: 72.6 mg/L Inhalation LC50 rat 4h: 64000 ppmV Inhalation LC50 rat 8h: 16000 ppmV Inhalation LD50 rat 24h: 5045 mg/kg Orally

UREA

LD50 rabbit 24h: 8200 mg/kg Dermally LD50 rat 24h: 8471 mg/kg Orally

Skin corrosion/irritation

The mixture is judged as a whole and is classified to be neither corrosive nor irritant to skin. Mild irritation may occur on prolonged or repeated exposure.

Serious eye damage/irritation

The mixture is judged as a whole and is classified to be neither corrosive nor irritant to the eyes. Mild irritation may occur on prolonged or repeated exposure.

Respiratory or skin sensitisation

Not sensitising.

Germ cell mutagenicity

The product is not classified as mutagen.

Carcinogenicity

The product is not classified as carcinogenic.

Reproductive toxicity

The product is not classified as a reproductive toxicant.

STOT-single exposure

No known hazards for occasional exposure.

STOT-repeated exposure

Repeated exposure may cause organ damage.

Aspiration hazard

The product is not classified as being toxic for aspiration.

SECTION 12: Ecological information

12.1. Toxicity

The product, according to current criteria and based on available information, is considered not to be harmful to the environment.

ETHYLENE GLYCOLE

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

LC50 fathead minnow (Pimephales promelas) 96h: 72860 mg/l

EC50 Freshwater water flea (Daphnia magna) 48 h: > 100 mg/l

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

EC50 Algae (Selenastrum capricornutum) 96h: 6500 - 7500 mg/L

PROPAN-2-OL

LC50 fathead minnow (Pimephales promelas) 96h: 9640 mg/L

LC50 Freshwater water flea (Daphnia magna) 48h: 2285 mg/L

EC50 Freshwater water flea (Daphnia magna) 48 h: 13299 mg/l

LC50 Fish 96h: 1000 mg/l

EC50 Freshwater water flea (Daphnia magna) 24h: 10 - 100 mg/l

EC50 Algae 24h: 1 - 10 mg/l

UREA

LC50 Freshwater water flea (Daphnia magna) 48h: > 10000 mg/l

LC50 Ide (Leuciscus idus) 96h: > 6810 mg/l

EC10 Bacteria 16 h: > 10000 mg/l

EC10 Freshwater algae: 47 mg/l

12.2. Persistence and degradability

There is no information regarding persistence or degradability.

12.3. Bioaccumulative potential

There is no information regarding bioaccumulation.

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

No known effects or hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste handling of the product

Discarded products must be disposed of as hazardous waste in accordance with regulations.

Not completely emptied packaging can contain remnants of dangerous substances and should therefore be handled as hazardous waste according to the above. Completely emptied packaging can be recycled.

Residual, old or contaminated product should be disposed of at a waste management facility.

Observe local regulations.

See also national waste regulations.

SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

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

14.8 Other transport information

Not applicable

SECTION 15: Regulatory information

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

Not indicated.

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

Earlier versions

2018-08-28 Changes in section(s) 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13.

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 4*oral* Acute toxicity (Category 4 oral)

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

Flam Liq 2 Flammable liquids (Category 2) Eve Irrit 2 Irritates eyes (Category 2)

STOT SE 3*drow* Specific target organ toxicity - Single exposure (Category 3, Narcosis effect)

Explanations of the abbreviations in Section 8

United Kingdom (EH40/2005 (Third edition, published 2018)

Sk Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity

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

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Ouebec H3C 5H7, Canada)

IATA The International Air Transport Association

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 2019-01-17.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

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

2015/830 COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 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

EH40/2005 EH40/2005 Workplace exposure limits

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

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

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I , where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI .

16e. List of relevant hazard statements and/or precautionary statements

Full texts for hazard statements mentioned in section 3

- H302 Harmful if swallowed
- H373 May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>
- H225 Highly flammable liquid and vapour
- H319 Causes serious eye irritation
- H336 May cause drowsiness or dizziness

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

This product can cause harm if used improperly. The manufacturer, the distributor or the supplier are not responsible for adverse effects if the product is not handled in accordance with the directions for use.

Other relevant information

Not indicated

Editorial information



This material safety data sheet has been prepared and checked by KemRisk®, KemRisk Sweden AB, Platensgatan 8, SE-582 20 Linköping, Sweden, www.kemrisk.se