SAFETY DATA SHEET

In accordance with 1907/2006 Annex II (2015/830) and 1272/2008
(All references to EU regulations and directives are abbreviated into only the numeric term)
Issued 2017-06-07
Replaces issued SDS 2016-10-10
Version number 3.0

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

1.1. Product identifier

Trade name	Prestolit Ultra Plus

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

Upon assessment, this mixture is not classified as hazardous according to 1272/2008

2.2. Label elements

Hazard pictogram	Not applicable
Signal word	Not applicable
Hazard statement	Not applicable

2.3. Other hazards

Not indicated.

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
AMMONIUM DIHYDROGEN PHOSPHATE		
CAS No: 7722-76-1 EC No: 231-764-5 REACH: 01-2119488166-29		48 - 93 %
AMMONIUM SULFATE		
CAS No: 7783-20-2 EC No: 231-984-1 REACH: 01-2119455044-46		0 - 38 %
TALC		
CAS No: 14807-96-6 EC No: 238-877-9 REACH: 17-2119954134-41		<3 %
HEXAMETHYLDISILOXANE		
CAS No: 107-46-0 EC No: 203-492-7 REACH: 17-2120065440-65	Flam Liq 2, Aquatic Acute 1, Aquatic Chronic 2; H225, H400, H411	<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 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

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

Remove contact lenses immediately if possible.

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

Upon skin contact

Normal washing of the skin is considered sufficient; If nevertheless symptoms do occur, contact a physician.

Remove contaminated clothes.

Upon ingestion

Rinse mouth out thoroughly first with water, then SPIT OUT the rinse water. Drink at least half a litre of water and seek medical advice. DO NOT INDUCE VOMITING.

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

No further relevant information available.

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

Symptomatic treatment.

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

Not indicated.

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 suitable allergy-tested protective gloves when cleaning up.

Dust filter IIb (P2) may be required when cleaning up.

Protect face and eyes with a visor or safety goggles when cleaning up spillage.

6.2. Environmental precautions

Avoid discharge into sewers.

6.3. Methods and material for containment and cleaning up

To be collected with caution and transported to a waste disposal facility.

Avoid stirring the material up so that it aerates.

6.4. Reference to other sections

Contaminated products should be treated as chemical waste and declared as non-hazardous goods.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

Do not inhale dust and avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Store tightly, in original packaging.

Store in a dry place not above normal room temperature.

7.3. Specific end uses

Not relevant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National limit values

TALC

United Kingdoms (EH40/2005)
Time-weighted-average exposure limit (TWA) 1 mg/m^3

MICA-GROUP MINERALS

United Kingdoms (EH40/2005)
Time-weighted-average exposure limit (TWA) 0.8 mg/m^3

SILICON DIOXIDE

United Kingdoms (EH40/2005)
Time-weighted-average exposure limit (TWA) 0.1 mg/m^3

DNEL
AMMONIUM DIHYDROGEN PHOSPHATE

	Type of exposure	Route of exposure	Value
Consumer	Chronic Systemic	Inhalation	1.8 mg/m^3
Worker	Chronic Systemic	Dermal	34.7 mg/kg bw/d
Worker	Chronic Systemic	Inhalation	6.1 mg/m^3
Consumer	Chronic Local	Inhalation	20 mg/m^3
Consumer	Chronic Systemic	Oral	2.1 mg/kg bw/d
Consumer	Chronic Systemic	Dermal	20.8 mg/kg bw/d

AMMONIUM SULFATE

	Type of exposure	Route of exposure	Value
Consumer	Chronic Systemic	Inhalation	1.67 mg/m^3
Worker	Chronic Systemic	Dermal	42.67 mg/kg bw/d
Worker	Chronic Systemic	Inhalation	11.17 mg/m^3
Consumer	Chronic Local	Inhalation	20 mg/m^3
Consumer	Chronic Systemic	Oral	6.4 mg/kg bw/d
Consumer	Chronic Systemic	Dermal	12.8 mg/kg bw/d

PNEC
AMMONIUM DIHYDROGEN PHOSPHATE

Environmental protection target	PNEC value
Fresh water	1.7 mg/l
Marine water	0.17 mg/l
Food chain	17 mg/l

AMMONIUM SULFATE

Environmental protection target	PNEC value
Fresh water	0.312 mg/l
Freshwater sediments	0.063 mg/kg
Marine water	0.0312 mg/l
Food chain	0.53 mg/l
Microorganisms in sewage treatment	16.18 mg/l
Soil (agricultural)	62.6 mg/kg

8.2. Exposure controls
No special measures need to be taken in the event of normal handling or use.

8.2.1. Appropriate engineering controls

Maintenance and service of personal protective equipment shall be included in the works plan for internal supervision. All inspections and remedial measures shall be documented.

Eye/face protection

Use safety glasses with a strong seal if there is a risk of splashing.

Skin protection

Wear protective gloves if risk of skin contact.

Respiratory protection

Protective breathing equipment should only be required in extreme work-situations. Consult the manufacturer if this is the case.

Dust filter IIb (P2) may be required.

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: Powder. Colour: blue.
b) Odour	no smell or uncharacteristic smell
c) Odour threshold	Not indicated
d) pH	4.5
e) Melting point/freezing point	197 °C
f) Initial boiling point and boiling range	Not indicated
g) Flash point	Not indicated
h) Evaporation rate	Not indicated
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Not indicated
k) Vapour pressure	<0.00147 Pa
l) Vapour density	Not indicated
m) Relative density	>0.8
n) Solubility	Solubility in water: Soluble
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	Not indicated
q) Decomposition temperature	>197 °C
r) Viscosity	Not indicated
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

Damp storage conditions may lead to formation of lumps and diminish the product quality.

10.5. Incompatible materials

Avoid contact with oxidizers.

Avoid contact with strong bases.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Not indicated.

Acute toxicity

The criteria for classification cannot be considered fulfilled based on available data.

AMMONIUM DIHYDROGEN PHOSPHATE

LD50 rabbit 24h: > 7940 mg/kg Dermally

LD50 rat 24h: 5750 mg/kg Orally

AMMONIUM SULFATE

LD50 Mouse 24h: 640 mg/kg Orally

LD50 rat 24h: 2840 mg/kg Orally

Skin corrosion/irritation

The criteria for classification cannot be considered fulfilled based on available data.

Serious eye damage/irritation

The criteria for classification cannot be considered fulfilled based on available data.

Respiratory or skin sensitisation

The criteria for classification cannot be considered fulfilled based on available data.

Germ cell mutagenicity

The criteria for classification cannot be considered fulfilled based on available data.

Carcinogenicity

The criteria for classification cannot be considered fulfilled based on available data.

Reproductive toxicity

The criteria for classification cannot be considered fulfilled based on available data.

STOT-single exposure

The criteria for classification cannot be considered fulfilled based on available data.

STOT-repeated exposure

The criteria for classification cannot be considered fulfilled based on available data.

Aspiration hazard

The criteria for classification cannot be considered fulfilled based on available data.

SECTION 12: Ecological information

12.1. Toxicity

The product is not to be labelled as a environmental hazard. However, it is not inconceivable that large emissions, or repeated small emissions, can have a harmful effect on the environment.

AMMONIUM DIHYDROGEN PHOSPHATE

LC50 Rainbow trout (Oncorhynchus mykiss) 96h: > 85.9 mg/l

AMMONIUM SULFATE

LC50 Rainbow trout (Oncorhynchus mykiss) 96h: 53 mg/l

TALC

LC50 Zebra fish (Brachydanio rerio) 96h: > 100 g/L

12.2. Persistence and degradability

The methods used to test biodegradability is not applicable on inorganic compounds.

12.3. Bioaccumulative potential

No information exists on bioaccumulation, but there is no cause for concern in respect of this.

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

No chemical safety report has been executed.

12.6. Other adverse effects

This product contains nutritive substances that may change the ecological balance in the local environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste handling of the product

Observe local regulations.

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

See also national waste regulations.

Classification according to 2006/12

Recommended LoW-code: 06 03 99 Wastes not otherwise specified

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
2016-10-10 Revisions of this document has, where not otherwise stated, been caused by changes in the regulations
16b. Legend to abbreviations and acronyms used in the safety data sheet
Full texts for Hazard Class and Category Code mentioned in section 3

Flam Liq 2	Flammable liquids (Category 2)
Aquatic Acute 1	Very toxic to aquatic life (Category Acute 1)
Aquatic Chronic 2	Toxic to aquatic life with long lasting effects (Category Chronic 2)

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, Quebec 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 2017-06-07.
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 Annex II (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
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

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

H225 Highly flammable liquid and vapour

H400 Very toxic to aquatic life

H411 Toxic to aquatic life with long lasting effects

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

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