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 2017-03-13
Replaces issued SDS 2014-03-19
Version number 2.0

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

1.1. Product identifier

Trade name	Protecta FR Foam

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

Identified uses	For industrial use

1.3. Details of the supplier of the safety data sheet

Company	Polyseam Ltd 15 St Andrews Road, Huddersfield, West Yorkshire United Kingdom,HD1 6SB
Telephone	01484 421036
E-mail	post.uk@polyseam.com
Website	https://www.protecta.co.uk/

1.4. Emergency telephone number

Acute cases: Call 112, request poison information.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Extremely flammable aerosol (Category 1 foam), H222,H229
Skin Irritant (Category 2), H315
May cause an allergic skin reaction (Category 1), H317
Irritates eyes (Category 2), H319
Acute toxicity (Category 4 gas), H332
Risk of allergic reaction or asthma if inhaled (Category 1), H334
Specific target organ toxicity - single exposure; May cause respiratory irritation (Category 3 resp), H335
Suspected of causing cancer (Category 2), H351
Specific target organ toxicity - repeated exposure (Category 2), H373

2.2. Label elements

Hazard pictogram

Signal word	Danger
Hazard statements	
H222,H229	Extremely flammable aerosol. Pressurised container: May burst if heated
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
Precautionary statements	
P102	Keep out of reach of children
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P211	Do not spray on an open flame or other ignition source
P251	Do not pierce or burn, even after use

P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves and eye protection
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing
P342+P311	If experiencing respiratory symptoms: Call a a POISON CENTER or doctor/physician
P405	Store locked up
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50°C/ 122°F

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
POLY-(PHENYL ISOCYANATE)-co-FORMALDEHYDE		
CAS No: 9016-87-9	Acute Tox 4*dust*, Skin Irrit 2, Eye Irrit 2, Resp Sens 1, Skin Sens 1, Carc 2, STOT SE 3*resp*, STOT RE 2; H332, H315, H319, H334, H317, H351, H335, H373	30 - 60 %
TRIS(1-CHLORO-2-PROPYL) PHOSPHATE		
CAS No: 13674-84-5 EC No: 237-158-7	Acute Tox 4*oral*; H302	<25 %
PROPANE		
CAS No: 74-98-6 EC No: 200-827-9 Index No: 601-003-00-5 REACH: 01-2119486944-21	Flam Gas 1, Press Gas *P*; H220, H280	<15 %
ISOBUTANE < 0.1 % BUTADIENE		
CAS No: 75-28-5 EC No: 200-857-2 Index No: 601-004-00-0 REACH: 01-2119485395-27	Flam Gas 1, Press Gas *P*; H220, H280	<15 %
BUTANE		
CAS No: 106-97-8 EC No: 203-448-7 Index No: 601-004-00-0 REACH: 01-2119474691-32	Flam Gas 1, Press Gas *P*; H220, H280	<15 %
METHYL ETHER		
CAS No: 115-10-6 EC No: 204-065-8 Index No: 603-019-00-8	Flam Gas 1, Press Gas *P*; H220, H280	<10 %

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 persist, call a doctor/physician.

Upon breathing in

Allow the injured person to rest in a warm place with fresh air, seek medical advice.

Upon eye contact

Flush immediately with luke-warm water for 15 - 20 minutes with wide-open eyes. If symptoms persist, seek medical advice.

Upon skin contact

Wipe off.

Wash the skin with soap and water.

If symptoms occur, contact a physician.

Upon ingestion

Rinse nose, mouth and throat with water.

Drink a couple of glasses of water immediately.

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

Generally

May cause damage to organs through prolonged or repeated exposure.

Upon breathing in

Can trigger allergies during inhalation and cause irritation, cough and breathing troubles. During prolonged or repeated inhalation there is a risk of asthma-resembling problems.

Upon eye contact

Eye irritation may occur.

Upon skin contact

Allergic reactions.

Skin irritation may occur.

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

No further relevant information is available.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Extinguish with water mist, powder, carbon dioxide or alcoholresistant foam.

5.2. Special hazards arising from the substance or mixture

The product is flammable.

Note that the extinguishing water may contain toxic substances or other hazardous substances.

The vapours may form explosive mixtures with air at room temperature.

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.

Cool closed containers that were exposed to fire with water.

Wear full protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not inhale the product and avoid exposure to skin and eyes.

Use recommended safety equipment, see section 8.

Switch off equipment which has an exposed flame, glows, or has a heat source of some other kind.

Ensure good ventilation.

Keep unauthorized and unprotected people at a safe distance.

6.2. Environmental precautions

Avoid release to drains, soil or watercourses.

6.3. Methods and material for containment and cleaning up

To be collected with caution and transported to 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

See also section 7 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

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

Read and follow the manufacturer's instructions.

Open fire, hot items, sparks or other ignition sources must not be present in the environment used for handling this product.

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.

Wash contaminated clothing before reuse.

Wash your hands after using the product.

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

Take precautionary measures against static discharge.

7.2. Conditions for safe storage, including any incompatibilities

Store tightly, in original packaging.

Store in a well-ventilated space.

Store at 5 - 30 °C.

Protect from frost.

Store in a ventilated space.

7.3. Specific end uses

Not relevant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National limit values

BUTANE

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 600 ppm / 1450 mg/m^3

Short term exposure limit (STEL) 750 ppm / 1810 mg/m^3

METHYL ETHER

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 400 ppm / 766 mg/m^3

Short term exposure limit (STEL) 500 ppm / 958 mg/m^3

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

For the safety and health protection of workers according to EU directives 89/391 , 98/24 and 98/24 and national occupational legislation, measures due to both the physical and general health hazards of this product and the carcinogenic and/or mutagenic properties of any of the ingredients (see Sections 2, 3, 10 and 11) must be considered.

Eye/face protection

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

Skin protection

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

Use suitable protective clothing.

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.

Respiratory protection

Use proper protective breathing protection.

8.2.3. Environmental exposure controls

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: aerosol. Colour: grey.
b) Odour	characteristic
c) Odour threshold	Not indicated
d) pH	Not indicated
e) Melting point/freezing point	Not indicated
f) Initial boiling point and boiling range	Not indicated
g) Flash point	0.0 °C
h) Evaporation rate	Not indicated
i) Flammability (solid, gas)	Extremely flammable aerosol
j) Upper/lower flammability or explosive limits	Lower explosion limit 1.5% Upper explosion limit 11%
k) Vapour pressure	Not indicated
l) Vapour density	Not indicated
m) Relative density	≤1.3 g/cm^3

n) Solubility	Solubility in water: Insoluble
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	>350 °C
q) Decomposition temperature	Not indicated
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 during normal use.

10.4. Conditions to avoid

Avoid sources of ignition and excessive temperatures.

The product is sensitive to light.

10.5. Incompatible materials

Avoid contact with water.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Not indicated.

Acute toxicity

Harmful if inhaled.

Harmful if swallowed.

TRIS(1-CHLORO-2-PROPYL) PHOSPHATE

LD50 rat 24h: 630 mg/kg Orally

PROPANE

LC50 rat 4h: 658 mg/L Inhalation

ISOBUTANE < 0.1 % BUTADIENE

LC50 rat 4h: 658 mg/L Inhalation

BUTANE

LC50 rat 4h: 658 mg/L Inhalation

LD50 rat 24h: 658000 mg/kg Orally

METHYL ETHER

LC50 rat 4h: 308 mg/L Inhalation

Skin corrosion/irritation

Not indicated.

Serious eye damage/irritation

Irritating to eyes.

Respiratory or skin sensitisation

The product contain allergenic substances.

Germ cell mutagenicity

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

Carcinogenicity

Is suspected to be carcinogenic.

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

Repeated exposure may cause organ damage.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

No ecological damage is known or expected in the event of normal use.

Prevent release on land, in water and drains.

PROPANE

LC50 Freshwater water flea (Daphnia magna) 48h: 16.3 mg/L

LC50 Fish 96h: 16.1 mg/L

IC50 Algae 72h: 11.3 mg/L

METHYL ETHER

LC50 Freshwater water flea (Daphnia magna) 48h: 2390 mg/L

LC50 Fish 96h: 1474 mg/L

IC50 Algae 72h: 1986 mg/L

12.2. Persistence and degradability

The product is not readily biodegradable.

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

Information about mobility in nature is not available.

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

Data lacking.

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.

Final disposal of this product should be carried out by a company authorised to deal with hazardous waste.

Classification according to 2006/12

Recommended LoW-code: 07 02 08 Other still bottoms and reaction residues
07 02 13 Waste plastic
15 01 05 Composite packaging

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

1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

Class

2: Gases

Classification code (ADR/RID)

5F: Aerosols, flammable

Labels

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Tunnel restrictions

Tunnel category: D

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

Not applicable

14.8 Other transport information

Transport category: 2; Highest total quantity per transported unit 333 kg or liters
Varying stowage category, see IMDG (IMDG)
Emergency Schedule (EmS) for FIRE (IMDG) F-D
Emergency Schedule (EmS) for SPILLAGE (IMDG) S-U

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

2014-03-19 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

Acute Tox 4*dust*	Acute toxicity (Category 4 dust)
Skin Irrit 2	Skin Irritant (Category 2)
Eye Irrit 2	Irritates eyes (Category 2)
Resp Sens 1	Risk of allergic reaction or asthma if inhaled (Category 1)
Skin Sens 1	May cause an allergic skin reaction (Category 1)
Carc 2	Suspected of causing cancer (Category 2)
STOT SE 3*resp*	Specific target organ toxicity - single exposure; May cause respiratory irritation (Category 3 resp)
STOT RE 2	Specific target organ toxicity - repeated exposure (Category 2)
Acute Tox 4*oral*	Acute toxicity (Category 4 oral)
Flam Gas 1	Extremely flammable gas (Category 1)
Press Gas *P*	Compressed gas

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

Tunnel restriction code: D; Passage forbidden through tunnels of category D and E type
Transport category: 2; Highest total quantity per transported unit 333 kg or liters

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 2017-03-13.

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
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

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

H332 Harmful if inhaled
H315 Causes skin irritation
H319 Causes serious eye irritation
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317 May cause an allergic skin reaction
H351 Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>
H335 May cause respiratory irritation
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>
H302 Harmful if swallowed
H220 Extremely flammable gas
H280 Contains gas under pressure; may explode if heated

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