

Application:	Cavity gap sealing
Fire resistance period:	120 minutes
Insulation/integrity:	Insulation and integrity
Test standard(s):	BS 476: Part 20/22 and BS EN 1366-4
Approval type:	Certifire CF828

Fire Rated PU Foam



Pyroplex[®] Fire Rated PU Foam is a flame retardant based polyurethane expanding foam, which sets in a solid form by using moisture present in the atmosphere. The product is suitable for sealing gaps around doors and window frames, using a supplementary backing media.

Pyroplex[®] Fire Rated PU Foam is an ablative product, which will achieve a fire resistance period of up to 120 minutes when used in conjunction with a mineral fibre backing material. It is tested to BS 476: Part 20/22, BS EN 1366-4 and has a European Classification EI120 in accordance with BS EN 13501-2. Compliant with the requirements given in CERTIFIRE TS40.

Certifire Certificate No. CF828 (Available to download from the Pyroplex website, www.pyroplex.com)

FIELD OF APPLICATION

Pyroplex[®] Fire Rated PU Foam is suitable for use in a wide range of applications including:

- Cavity joints between doors and window frames and linear joints [low improvement, ≤7.5%]
- For internal use only

PRODUCT FEATURES

- Fire resistance of up to 2 hours dependent upon gap to depth ratio
- Quick curing, can be cut, sawn or formed within 60 minutes of application
- Easy to install, with up to 3m linear joint being fitted in under 10 minutes
- Can be painted and/or plastered without additional primers
- Expands up to 38 times its volume, which can prove an economical solution to other alternatives

PRODUCT DATA

Gap width [mm]	Gap depth [mm]	Integrity [minutes]	Insulation [minutes]
15*	180	120	120
15	200	120	120
40*	180	120	120

*Requires suitable backing media, refer to supporting evidence.

INSTALLATION INSTRUCTIONS

Preparation of the substrate:

1. Surfaces must be firm, clean, free of dust and loose particles. The cavity or voided area to be filled must be well moistened with water, this will aid installation adhesion to the substrate.
2. It is important to use the foam within a temperature controlled environment, optimum application temperature +10°C > +30°C [+20°C ideal].
3. Cans should not be left in an over-heated environment, temperatures above +50°C or exposed to direct sunlight.
4. Prior to application, ensure that the surrounding area is protected, in particular when using the foam in retrofit applications. It may also be necessary to mask and protect the surrounding area of the cavity, particularly in areas where the compartment may be decorated or furnished.

5. Shake the can for two minutes, until the foam inside becomes liquid. This is essential to ensure the performance of the product. Then attach the adapter or gun to the canister.
6. Fill the cavity from the base of the aperture slowly and build up the layers of the foam, ensuring that the void is filled. Take care not to over-fill the cavity.
7. Allow the foam to cure and using a sharp bladed instrument, cut-off the expanded 'cured' foam.
8. Ensure that empty cans are disposed of by reference to local regulations.

PACKAGING INFORMATION

Pyroplex[®] Fire Rated PU foam is available in:



750ml gun application
Part No: PFRF750GUN



750ml hand held application
Part No: PFRF750A

QUALITY APPROVAL

Pyroplex Limited have a Quality Management System that meets the requirements of ISO 9001 and an Environmental Management System that meets the requirements of ISO 14001, both are independently verified by BSI Quality Assurance under Certificate Numbers FM 10371 and EMS 637894. Copies of these certificates are available on our website to download at www.pyroplex.com.

OTHER INFORMATION

The information contained herein is based upon the present state of our knowledge. Recipients of our Pyroplex[®] products must take responsibility for observing existing laws and regulations.

Due to our policy of continuous improvement, Pyroplex Limited reserves the right to amend specifications without prior notice.

TECHNICAL DATA:

PRODUCT TESTING

Pyroplex® Fire Rated PU Foam has been tested in accordance with BS 476: Part 20/22, BS EN 1366-4, and has a European Classification EI 120 in accordance with BS EN 13501-2.

SUPPORTING EVIDENCE

Certifire Certificate No. CF828

(Available to download from the Pyroplex website, www.pyroplex.com)

Test report No. WF178414 (Available upon request)

EN Classification Report WF357923 (Available upon request)

Environmental Classification report No. RES 163786. Rev 2 (Available upon request)

SPECIFICATION OVERVIEW

Product characteristics and physical attributes:

Characteristics	Appearance – result
750ml canister	Approximately 38 litres
Cell structure	Medium fine in appearance
Tack time	6 to 12 mins, dependent upon environmental conditions
Tool time [cutting]	Under 30 mins, dependent upon environmental conditions

STRUCTURAL CONSTRUCTIONS

Pyroplex® Fire Rated PU Foam can be used in walls of a solid construction.

Wall construction and fire resistance periods:

Construction element	Fire resistance period [mins]	Minimum thickness [mm]	Material types and minimum density
Wall	Up to 120 mins	200	Solid masonry work*, with a density no less than 760kg/M ³

* Aerated concrete, lightweight ash blocks and/or solid brick construction.

• Not recommended for use in partitions that are dry-lined using plasterboards.

BACKING MEDIA

Mineral Fibre insulation with a minimum density of 100kg/m³. The depth of the backing media should be equal to 20mm minimum thickness, with the minimum joint width of the backing media being 2mm greater than the joint width, to maintain sealing function under compression.

MAINTENANCE AND INSTALLATION RECORDS

Since the product is not subject to routine and replacement programmes, Pyroplex Limited recommend that all firestopping materials are checked on a regular basis to ensure that the product remains integral. Replace and fit any damaged components to reinstate the fire resistance.

PRODUCT GUARANTEE

Providing the product is installed in accordance with the requirements of the guidance document, the fire performance characteristics of the product is guaranteed for a period of 10 years.

TECHNICAL SUPPORT AND GUIDANCE

Should you require any further information regarding this product, please contact Pyroplex Limited or visit our website, www.pyroplex.com

MATERIAL SAFETY DATA:

ACCORDING TO 1907/2006/EC, ARTICLE 31

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

1.1 Product identifier: PFRF750GUN/PFRF750A

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

Application of the substance/the mixture Construction: Chemicals

1.3 Details of the supplier of the safety datasheet:

Manufacturer/Supplier:

Pyroplex Limited,
The Furlong,
Droitwich,
Worcestershire, WR9 9BG,
United Kingdom
Phone: +44 (0)1905 795432
Fax: +44 (0)1905 796662
Email: info@pyroplex.com
www.pyroplex.com

1.4 Emergency telephone number: European emergency number, 112 (24h) or local emergency services (as applicable)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

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



GHS02 Flame:

Aerosol 1: H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS08 Health Hazard:

Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2: H351 Suspected of causing cancer.

STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure.



GHS07:

Acute Tox. 4: H332 Harmful if inhaled.

Skin Irrit. 2: H315 Causes skin irritation.

Eye Irrit. 2: H319 Causes serious eye irritation.

Skin Sens. 1: H317 May cause an allergic skin reaction.

STOT SE 3: H335 May cause respiratory irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008.

The product is classified and labelled according to the CLP regulation.

Hazard Pictograms



GHS02



GHS08



GHS07

Signal word: Danger.

Hazard-determining components of labelling:

Diphenylmethanediisocyanate, isomers and homologues.

Hazard statements:

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

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.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

P102 Keep out of reach of children.

P260 Do not breathe gas.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. Do not pierce or burn, even after use. Protect from sunlight.

Do not expose to temperatures exceeding 50 °C/122 °F. Do not spray on an open flame or other ignition source. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards:

Results of PBT and vPvB assessment









PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with non-hazardous additions.

Identification	Chemical name/Classification		
Dangerous Components			
CAS: 9016-87-9 EC No.: 618-498-9	Diphenylmethane diisocyanate, isomers and homologues Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	 	30 - 60 %
CAS: 1244733-77-4 EC No.: 911-815-4 Reg.nr: 01-2119486772-26-XXXX	Tris(2-chlorisopropyl)-phosphate Acute Tox. 4, H302		<25 %
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr: 01-2119485395-27-xxxx	Isobutane Flam. Gas 1, H220; Press. Gas (Comp), H280		<15 %
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr: 01-21194869440-21-xxxx	Propane Flam. Gas 1: H220; Press. Gas (Comp), H280		<15 %
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr: 01-2119474691-31-xxxx	Butane Flam. Gas 1: H220; Press. Gas (Comp), H280		<15 %
CAS: 86675-46-9 Reg.nr: 01-2119972940-30-xxxx	Halogenated polyetherpolyol Acute Tox. 4, H302		<15 %
CAS: 115-10-6 EINECS: 204-065-8 Reg.nr: 01-2119472128-37-0001	Dimethyl ether Flam. Gas 1: H220; Press. Gas (Comp), H280		<10 %

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

After inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact: Remove uncured foam using a piece of cloth and an unaggressive solvent, e.g. ethanol. Wash your hands and the cleaned skin surface using soapy water. Cured foam can be removed mechanically with the use of a brush, soap and plenty of water. Use protective cream after skin surface has been cleaned.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.

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:

No further relevant information available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media Suitable extinguishing agents:

Carbon dioxide.

Fire-extinguishing powder.

Foam.

Water spray.

Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: Water with full jet.

5.2 Special hazards arising from the substance or mixture:

Can form explosive gas-air mixtures. Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters:

Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.

Additional information: Cool endangered receptacles with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedure:

Keep away from ignition sources.

Wear protective clothing.

Do not breathe gas / fumes / vapour / spray.

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Do not allow to enter sewers / surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Uncured foam adheres easily, hence it should be removed with caution.

Remove instantly using a piece of cloth and solvents, e.g. acetone, alcohol. Remove cured foam mechanically. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

6.4 Reference to other sections:

See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

Ensure good ventilation / exhaust at the workplace.

Open and handle receptacle with care.

Do not pierce or burn even after use. Use only as directed on the label.

Do not mix with any other chemical products.

Information about fire - and explosion protection:

Do not spray onto a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

7.2 Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles:

Store in a cool location.

Observe official regulations on storing packaging's with pressurised containers.

This product is subject to regulations governing the storage of highly flammable aerosol products.

Storage rooms should be equipped with heat and smoke detectors.

Electrical equipment should be explosion-proof.

Information about storage in one common storage facility:

Do not store together with acids.

Do not store together with alkalis (caustic solutions).

Store away from oxidising agents.

Store away from foodstuffs.

Store away from plastic, rubber, aluminium, light-metals.

Further information about storage conditions:

Store in vertical position in closed original containers.

Store receptacle in a well-ventilated area.

Protect from frost.

Store at temperature from +5°C to +30°C.

Store under lock and key and out of the reach of children.

Keep container tightly sealed.

Protect from heat and direct sunlight.

7.3 Specific end use(s):

No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Ingredients with limit values that require monitoring at the workplace		
CAS: 9016-87-9 Diphenylmethanediisocyanate, isomers and homologues		
WEL	Short-term value: 0.07 mg/m ³ Long-term value: 0.02 mg/m ³ Sen; as -NCO	
CAS: 115-10-06 Dimethyl ether		
WEL	Short-term value: 958 mg/m ³ , 500 ppm Long-term value: 766 mg/m ³ , 400 ppm	
CAS: 106-97-8 Butane		
WEL	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1,3-diene)	
DNEL's		
CAS: 9016-87-9 Diphenylmethanediisocyanate, isomers and homologues		
Oral	DNEL	20 mg/kg/day (General population, consumers)
Dermal	DNEL	0.05 mg/kg/day (General population, consumers)
Inhalative	DNEL	0.05 mg/m ³ (General population, consumers) 0.05 mg/m ³ (Workers)
CAS: 115-10-6 Dimethyl ether		
Inhalative	DNEL	471 mg/m ³ (General population, consumers) 189.4 mg/m ³ (Workers)
CAS: 86675-46-9 Halogenated polyetherpolyol		
Oral	DNEL	0.44 mg/kg/day (General population, consumers)
Dermal	DNEL	0.44 mg/kg/day (General population, consumers) 0.87 mg/kg/day (Workers)
Inhalative	DNEL	1.5 mg/m ³ (General population, consumers) 6 mg/m ³ (Workers)
CAS: 1244733-77-4 Tris (2-chlorisopropyl)-phosphate		
Oral	DNEL	0.52 mg/kg/day (General population, consumers) 1.04 mg/kg/day (Workers)
Dermal	DNEL	4 mg/kg/day (General population, consumers) 2.08 mg/kg/day (Workers)
Inhalative	DNEL	11.2 mg/m ³ (General population, consumers) 5.82 mg/m ³ (Workers)
PNEC's		
CAS: 9016-87-9 Diphenylmethanediisocyanate, isomers and homologues		
Freshwater	1 mg/l	
Seawater	0.1 mg/l	
Soil	1 mg/kg	
CAS: 86675-46-9 Halogenated polyetherpolyol		
Freshwater	1 mg/l	
Seawater	0.1 mg/l	
Freshwater Sediments	37.5 mg/kg	
Sea Water Sediements	3.75 mg/kg	
Soil	6.92 mg/kg	
CAS: 115-10-6 Dimethyl ether		
Freshwater	0.155 mg/l	
Seawater	0.016 mg/l	
Freshwater Sediments	0.681 mg/kg	
Sea Water Sediements	0.069 mg/kg	
Soil	0.045 mg/kg	
CAS: 1244733-77-4 Tris (2-chlorisopropyl)-phosphate		
Freshwater Sediments	13.4 mg/kg	
Sea Water Sediements	1.34 mg/kg	
Soil	1.7 mg/kg	

8.2 Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

Do not inhale gases / fumes / aerosols.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



PROTECTIVE GLOVES

EN 374

The glove material has to be impermeable and resistant to the product / the substance / the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves:

Polyethylene gloves.

Recommended thickness of the material: ≥ 0.020 mm.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

Short-term exposure ≥ 10 min (EN 374)

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



TIGHTLY SEALED GOOGLES

EN 166

Body protection: Protective work clothing.

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (supply):	19.53% weight
V.O.C. density at 20°C:	Non-applicable
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

General information:

Appearance:

Form: Aerosol. Rapidly curing foam dispensed by gaseous propellant from an aerosol container.

Colour: Different according to colouring.

Odour: Characteristics.

pH-value: -

Change in condition:-

Melting point/freezing point: Not determined.

Initial boiling point and boiling range: Not applicable, as aerosol.

9.2 Other information: No further relevant information available.

Flash point: <0 °C (propellant)

Auto-ignition temperature: $>+350$ °C (propellant)

Explosive properties: Heating may cause an explosion.

Explosion limits:

Lower: ± 1.5 Vol %

Upper: ± 11.0 Vol %

Vapour pressure: >500 kPa (in the container)

$< 1^* 10^{-5}$ mmHg w 25 °C (MDI)

Density at 20 °C: ≤ 1.3 (PMDI) g/cm³

Solubility in/Miscibility with Water: Insoluble. Reacts with water.

Partition coefficient: n-octanol/water: Not determined.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: No further relevant information available.

10.2 Chemical stability:

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: Strongly reacts with water and other substances containing an active hydrogen atom.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute toxicity: Harmful if inhaled.

LD/LC50 values relevant for classification:		
CAS: 9016-87-9 Diphenylmethanediisocyanate, isomers and homologues		
Oral	LD50	>10000 mg/kg (rat) (OECD401)
Dermal	LD50	>9400 mg/kg (rabbit) (OECD402)
CAS: 1244733-77-4 Tris (2-chlorisopropyl)-phosphate		
Oral	LD50	1,017 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

Primary irritant effect:

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitisation: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Suspected of causing cancer.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: May cause respiratory irritation.

STOT-repeated exposure: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Aquatic toxicity	
CAS: 1244733-77-4 Tris (2-chlorisopropyl)-phosphate	
EC50	47 mg/l (algae)

12.2 Persistence and degradability: Not biodegradable.

12.3 Bio-accumulative potential: Does not accumulate in organisms.

12.4 Mobility in soil: No further relevant information available.

Additional ecological information:

General notes: Water hazard class I (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system. Do not allow to enter surface or ground water. Dispose of in a safe manner in accordance with local / national regulations. Assigning a code from the waste catalogue depends on the sector, in which the user operates, as well as on arrangements made between the waste generator and a competent environment protection department.

Substance/mixture as a waste compound brings hazardous properties HP: 3, 4, 5, 6, 7, 13

European waste catalogue	
15 01 11*	Metallic packing containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

- 14.1 **UN number:**
ADR, IMDG, IATA UN1950
- 14.2 **UN proper shipping name:**
ADR, IMDG, IATA AEROSOLS
- 14.3 **Transport hazard class(es):**
ADR



Class: 2.5F Gases.
Label: 2.1

- 14.4 **IMDG, IATA**



Class: 2.1
Label: 2.1

- 14.5 **Environmental hazards:**
Marine pollution: No
- 14.6 **Special precautions for user**
Warning: Gases.
Danger code (Kemler): -
EMS Number: F-D, S-U

- 14.7 **Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

Transport/Additional information

ADR

Limited quantities (LQ): 1L
Excepted quantities (EQ): E0
Transport category: 2
Remarks: Exemption from ADR provisions by LQ principal (rule 3.4)
- Inner packaging, max.1 liter in capacity;
outer packaging - max. gross weight of 30kg.
- Inner packaging, max.1 liter in capacity, based on common ground and covered with shrink film - max. gross weight of 20kg.
Tunnel restriction code D.

UN 'Model Regulation': UN 1950 AEROSOLS, 2.1

SECTION 15: REGULATORY INFORMATION

- 15.1 **Safety, health and environmental regulations/legislation specific for the substance or Mixture**

Directive 2012/18/EU

Named dangerous substances - ANNEX I: None of the ingredients is listed.

Seveso category: P3a FLAMMABLE AEROSOLS.

Qualifying quantity (tonnes) for the application of lower-tier requirements: 150 t.

Qualifying quantity (tonnes) for the application of upper-tier requirements: 500 t.

REGULATION (EC) No 1907/2006 ANNEX XVII: Conditions of restriction: 56.

Other regulations, limitations and prohibitive regulations:

Substances of very high concern (SVHC) according to REACH, Article 57: None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

- H220 Extremely flammable gas.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- 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.

Recommended restriction of use:

The information stated above is based on current knowledge and applies to the product in the form in which it is used. Data concerning this product is presented in order to fulfil safety requirements and not to guarantee its specific properties. In cases when application conditions are not subject to manufacturer's control, the responsibility for safe product use and obeying law regulations in particular, lies on the user's side. Information in the appropriate technical data sheet of product.

Abbreviations and acronyms:

- ADR:** Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).
- IMDG:** International Maritime Code for Dangerous Goods.
- IATA:** International Air Transport Association.
- GHS:** Globally Harmonised System of Classification and Labelling of Chemicals.
- EINECS:** European Inventory of Existing Commercial Chemical Substances.
- ELINCS:** European List of Notified Chemical Substances.
- CAS:** Chemical Abstracts Service (division of the American Chemical Society).
- DNEL:** Derived No-Effect Level (REACH).
- PNEC:** Predicted No-Effect Concentration (REACH).
- LC50:** Lethal concentration, 50 percent.
- LD50:** Lethal dose, 50 percent.
- PBT:** Persistent, Bioaccumulative and Toxic.
- SVHC:** Substances of Very High Concern.
- vPvB:** very Persistent and very Bioaccumulative.
- Flam. Gas 1:** Flammable gases – Category 1.
- Aerosol 1:** Aerosols – Category 1.
- Press. Gas (Comp.):** Gases under pressure – Compressed gas.
- Acute Tox. 4:** Acute toxicity – Category 4.
- Skin Irrit. 2:** Skin corrosion/irritation – Category 2.
- Eye Irrit. 2:** Serious eye damage/eye irritation – Category 2.
- Resp. Sens. 1:** Respiratory sensitisation – Category 1.
- Skin Sens. 1:** Skin sensitisation – Category 1.
- Carc. 2:** Carcinogenicity – Category 2.
- STOT SE 3:** Specific target organ toxicity (single exposure) – Category 3.
- STOT RE 2:** Specific target organ toxicity (repeated exposure) – Category 2.

Last version: Nov 2018

Changes made: Visual changes

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