



PASSIVETEC[®] FS FOAM

MATERIAL SAFETY DATASHEET

1. IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Identification of substance:

Product Name: PassiveTec® FS Foam

1.2 Application of the substance / mixture

Construction chemicals
Assembly foam

1.3 Company

PassiveTec®
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Languages spoken: English

2. HAZARDS IDENTIFICATION.

2.1 Classification of the mixture

Classification according to Regulation (EC) No 1272/2008
Classification according to Directive 67/548/EEC or Directive 1999/45/EC

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

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

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures: Substances presenting a health or environmental hazard.

Chemical characterisation: Mixtures

Dangerous components:

CAS: 9016-87-9 EINECS: 202-966-0	Diphenylmethanediisocyanate isomers and homologues	30.0-60.0%
CAS: 13674-84-5	tris (2-chlorisopropyl)-phosphate	< 25.0%
CAS: 74-98-6 EINECS: 200-827-9	Propane	< 15.0%
CAS: 106-97-8 EINECS: 203-448-7	Butane	< 15.0%
CAS: 75-28-5 EINECS: 200-857-2	Isobutane	< 15.0%
CAS: 115-10-6 EINECS: 204-065-8	Dimethyl ether	< 10.0%

4. FIRST AID MEASURES.

4.1 Description of first aid measures.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Inhalation.

Ensure removal into fresh air and be sure to call for a doctor immediately. In the case of unconsciousness, place patient in a stable position on their side ready for transportation

Eye contact.

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

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.

Ingestion.

Rinse out mouth and then drink plenty of water.

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.

5. FIREFIGHTING MEASURES.

5.1 Extinguishing media.

Suitable extinguishing agents:

Carbon dioxide

Fire-extinguishing powder

Foam

Water haze

Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the 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.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures.

- 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.

Follow the recommendations under section 13.

7. HANDLING AND STORAGE.

7.1 Precautions for safe handling.

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.

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 packagings with pressurised containers.

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.

Further information about storage conditions:

- Store in vertical position in closed original containers.
- 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Ingredients with limit values that require monitoring at the workplace:

- 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

WELL Short-term value: 0.07 mg/m³

Long-term value: 0.02 mg/m³

Sen; as -NCO

- 106-97-8 butane

WELL Short-term value: 1810 mg/m³, 750 ppm

Long-term value: 1450 mg/m³, 600 ppm

Carc (if more than 0.1% of buta-1.3-diene)

- 115-10-6 dimethyl ether

WELL Short-term value: 958 mg/m³, 500 ppm

Long-term value: 766 mg/m³, 400 ppm

8.2 Exposure controls.

Measures of a technical nature:

Do not eat, drink, smoke or sniff while working. 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.

Breathing protection:

PPE: Self-contained respiratory protective device

Observations: 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.

Hand protection:

PPE: Protective gloves

Observations: 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.

Polyethylene gloves

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 can not be calculated in advance and has therefore to be checked prior to the application.

Eye protection:

PPE: Tightly sealed goggles

Skin protection:

PPE: Protective work clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties.

Appearance	Aerosol: Rapidly curing foam dispensed by gaseous propellant from an aerosol container
pH	Not determined
Colour	Grey
Flash point	< 0 °C (propellant)
Self-igniting	> +350 °C (propellant)
Explosion limits	Lower: +/- 1.5 Vol % Upper: +/- 11 Vol %
Vapour pressure:	>500 kPa (in the container) <1*10 ⁻⁵ mmHg w 25°C (MDI)
Density at 20°C	≤1.3 (PMDI) g/cm ³
Solubility in / Miscibility with water	Insoluble Reacts with water
Partition coefficient	Not determined

10. STABILITY AND REACTIVITY

10.1 Reactivity.

The product does not present hazards by their reactivity.

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.

11. TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

Acute toxicity:

LD/LC50 values relevant for classification:

13674-84-5 tris(2-chlorisopropyl)-phosphate

101-68-8 4,4'-methylenediphenyl diisocyanate

Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.

- on the eye: Irritating effect.

Sensitisation:

Sensitisation possible through inhalation.

Sensitisation possible through skin contact.

11.2 Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Harmful, Irritant

12. ECOLOGICAL INFORMATION.

12.1 Toxicity.

Aquatic toxicity: 13674-84-5 tris(2-chlorisopropyl)-phosphate

12.2 Persistence and degradability.

Not biodegradable.

12.3 Bioaccumulative potential.

Does not accumulate in organisms.

12.4 Mobility in soil.

No further relevant information available.

12.5 Results of PBT and vPvB assessment.

PBT: Not applicable. vPvB: Not applicable.

12.6 Other adverse effects.

No further relevant information available.

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

13. DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Must not be disposed together with household garbage.
Do not allow product to reach sewage system.

14. TRANSPORT INFORMATION.

UN-Number ADR,IMDG,IATA	1950
UN Proper shipping name ADR,IMDG,IATA	Aerosols
Transport hazard class ADR,IMDG,IATA Class Label	2 Gases 2.1
Packing group ADR,IMDG,IATA	Void
Environmental hazards Marine pollutant	No
Special precautions for user Danger code (Kemler) EMS Number	- F-D, S-U
Transport in bulk according to Annex II	Not applicable
ADR Limited quantities (LQ) Transport category Remark	LQ2 2 Exemption from ADR provisions by LQ principal -Inner packaging, max 1 liter in capacity; outer packaging-max. gross weight of 20 kg. -Inner packaging, max 1 liter in capacity, based on common grouping and covered with shrink film - max. gross weight of 20 kg.
UN Model Regulation	UN 1950 AEROSOL 2.1

15. REGULATORY INFORMATION.

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

No further relevant information available.

15.2 Chemical safety assessment.

A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION.

It is recommended that the product only be employed for the purposes advised.

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.
R12 Extremely flammable.
R20 Harmful by inhalation.
R22 Harmful if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R40 Limited evidence of a carcinogenic effect.
R42/43 May cause sensitisation by inhalation and skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

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 fulfill 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.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending 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.



The information contained in this document is based on current knowledge and complies with the relevant EU legislation. However the methods and conditions of use of any product described, are the responsibility of the user. The product must not be used for any purpose other than those designated in this document, except in the case of written approval by the company on how to handle the product. It is the responsibility of the user to ensure full compliance with current local legislations. The information contained in this document only contains information for the preparation of the product and does not constitute a warranty of its properties.

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