



1. Identification of the substance/preparation and of the company/undertaking

1.1 Identification of the substance or preparation

Product Name: Rapidseal B1 Fire Rated PU Foam

1.2 Company/undertaking identification

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2. Composition / Information on Ingredients

Chemical characterization: Mixtures

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

CAS: 9016-87-9	polymethylene	Xi; R 20-36/37/38-40-42/43-48/20	30.0 60.0%
CAS: 13674-84-5	tris(2-chlorisopropyl)-phosphate	Xn; R 22	< 25.0%
CAS: 74-98-6			
EINECS: 200-827-9	propane	F+; R 12	< 15.0%
CAS: 106-97-8			
EINECS: 203-448-7	butane	F+; R 12	< 15.0%
CAS: 75-28-5			
EINECS: 200-857-2	isobutene	F+; R 12	< 15.0%
CAS: 115-10-6			
EINECS: 204-065-8	dimethyl ether	F+; R 12	< 10.0%

3. Hazards identification

Information concerning particular hazards for human and environment:

Combustible gas, more heavy from air; can crowd at surfaces and in lower parties of rooms. Foam is easily to glue to the skin and other surfaces.

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

R 20 Harmful by inhalation.

R 36/37/38 Irritating to eyes, respiratory system and skin. R 40 Limited evidence of a carcinogenic effect.

R 42/43 May cause sensitisation by inhalation and skin contact.

R 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation. Contains isocyanates. See information supplied by the manufacturer

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

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.

Keep away from sources of ignition - No smoking.



Do not spray on a naked flame or incandescent material. Keep out of the reach of children.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4. First Aid measures

General information:

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

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Remove non hardened foam using delicate solvent like neutral concentrated ethanol (avoid contact with eyes). Hardened foam may be removed by washing using soap and large water quantity. If irritation develops, you will apply delicate cream.

· 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.

5. Fire Fighting Measures

· Suitable extinguishing agents:

Carbon dioxide

Fire-extinguishing powder

Foam

Water haze

Use fire extinguishing methods suitable to surrounding conditions.

· Special hazards caused by the substance, its products of combustion or resulting gases:

Can form explosive gas-air mixtures.

Formation of toxic gases is possible during heating or in case of fire.

· Protective equipment:

Wear self-contained respiratory protective device. Wear fully protective suit.

6. Accidental Release Measures

Person-related safety precautions:

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.

· Measures for environmental protection:

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

· Measures for cleaning/collecting:

Non cured foam easily sticks, so remove it carefully. Foam residues remove immediately using cloth and delicate solvents like concentrated ethanol. Cured foam may be removed mechanically and polished. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.



7. Handling and Storage

Handling:

- Information 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.

Pressurized 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.

- Storage:

- Requirements to be met by storerooms and receptacles:

Store in a cool location.

Observe official regulations on storing packaging with pressurized 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 oxidizing 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.

8. Exposure Controls / Personal Protection

- Ingredients with limit values that require monitoring at the workplace:

9016-87-9 polymethylene polyphenyl polyisocyanate, isomers and homologues

WEL

Short-term value: 0.07 mg/m³

Long-term value: 0.02 mg/m³

Sen; as -NCO

106-97-8 butane

WEL

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

WEL

Short-term value: 958 mg/m³, 500 ppm

Long-term value: 766 mg/m³, 400 ppm· Additional information: The lists valid during the making were used as basis.

- Personal protective equipment:

- General protective and hygienic measures: Do not eat, drink, smoke or sniff while working. Keep away from foodstuffs, beverages and feed.



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Immediately remove all soiled and contaminated clothing

Wash hands after. 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:

Wear protective gloves

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

PVC gloves

Rubber 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.

· Penetration time of glove material

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 goggles

· Body protection: Protective work clothing

9. Physical and Chemical Properties

· General Information

Form: Aerosol

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

Colour: Pink

Odour: Characteristic

· Change in condition

Melting point/Melting range:

Undetermined.

Boiling point/Boiling range:

Not applicable, as aerosol.

· Flash point:

< 0°C (propellant)

· Self-igniting:

> +350 °C (propellant)

· Danger of explosion:

Product is not explosive.

However, formation of explosive air/ vapour mixtures are possible.

· 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/cm³
- Solubility in / Miscibility with water: Insoluble. Reacts with water.
- Ph-value: Not determined
- Segregation coefficient (n-octanol/water): Not determined

10. Stability and Reactivity

- Thermal decomposition / conditions to be avoided:
- No decomposition if used and stored according to specifications.
- Materials to be avoided: Strongly reacts with water and other materials contains active hydrogen.
- Dangerous reactions No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.

11. Toxicological Information

- Acute toxicity:

- LD/LC50 values relevant for classification:

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

Oral LD50 > 2000 mg/kg (rat)

Dermal LD50 > 2000 mg/kg (rat)

Inhalative LD50 > 0.5 mg/l (rat)

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

Oral LD50 9200 mg/kg (rat)

Inhalative LC50/4 h 178 mg/l (rat)

Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.

Sensitization:

Sensitization possible through inhalation. Sensitization possible through skin contact.

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

- Sensitisation May cause sensitisation by inhalation and skin contact.



12. Ecological Information

Information about elimination (persistence and degradability): Not biodegradable

- Behaviour in environmental systems:
- Mobility and bioaccumulation potential: Does not accumulate in organisms
- Ecotoxicological effects:

· Aquatic toxicity:

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

EC50

47 mg/l (96h) (alg)

· Additional ecological information:

· General notes:

Water hazard class 1 (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.

13. Disposable Considerations

Product:

· Recommendation

Must not be disposed together with household waste. Do not allow product to enter sewage system.

· European waste catalogue

07 02 08*

other still bottoms and reaction residues

07 02 13

waste plastic

15 01 05

composite packaging

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

14. Transportation Information

· Land transport ADR/RID (cross-border)

· ADR/RID class: 2 5F Gases.

· Danger code (Kemler): -

· UN-Number: 1950

· Packaging group: -

· Hazard label: 2.1

· Proper shipping name: AEROZOLE

· Remarks: Exemption from ADR provisions by LQ principal (rule 3.4.5)

(Contd. of page 6)

- 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.



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Maritime transport IMDG:

IMDG Class: 2 5F

UN Number: 1950

Label 2.1

Packaging group: -

EMS Number: F-D,S-U

Marine pollutant: No

Proper shipping name: AEROZOLE

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 2 5F

UN/ID Number: 1950

Label 2.1

Packaging group: -

Proper shipping name: AEROZOLE

15. Regulatory Information

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:

Xn Harmful

F+ Extremely flammable

· Hazard-determining components of labelling:

polymethylene polyphenyl polyisocyanate, isomers and homologues

· Risk phrases:

20 Harmful by inhalation.

36/37/38 Irritating to eyes, respiratory system and skin.

40 Limited evidence of a carcinogenic effect.

42/43 May cause sensitisation by inhalation and skin contact.

48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

· Safety phrases:

23 Do not breathe gas/fumes/vapour/spray.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

51 Use only in well-ventilated areas.

63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.

· Special labelling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer

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

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.



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Keep away from sources of ignition - No smoking.

Do not spray on a naked flame or incandescent material. Keep out of the reach of children.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the content of the Material Safety Data Sheet.



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