

SMH Products Limited

Material Data Sheet

1 Identification of substance

Product details: Expanding Foam

Supplier:

SMH Products Ltd
SMH House
Maxwell Street
South Shields / NE33 4PU

- Informing department: Sales Department
- Emergency Information: Common and regional emergency call

2 Composition / Data on components:

- Chemical characterization - Description:

Urethanprepolymer with liquefied propellants / flammable and under pressure

Dangerous components:

-Contains Diphenylmethane-4, 4 - diisocyanate and flammable propellants

11) 1 -68-8 diphenylmethane-4,4 - diisocyanate	5-10%
Xn; R 20-36/37/38-42	
106-97-8 butane/ pure	2.5- 10%
F+; R 12	
1 15-10-6-dimethyl ether	2.5-10%
F+; R 12	

3 Hazards identification

- Hazard designation: Xn Harmful

F+ Extremely flammable

-Information pertaining to particular dangers for man and environment:
R 36/37/38 Irritating to eyes, respiratory system and skin

R 12 Extremely Flammable
R 18 In use may form flammable / explosive vapour - air mixture

R 42 May cause sensitisation by inhalation

Contains isocyanates. See information supplied by the manufacturer.

-Classification system: The classification is in the line with current EC lists; it is Expanded, however, by information from technical literature and by information furnished by supplier companies.

4 First aid measures

After inhalation: Supply fresh air; consult doctor in case of symptoms. After skin contact: Instantly wash with water and soap and rinse thoroughly. After eye contact: Rinse opened eye for several minutes under running water. Then consult doctor. After swallowing: Do not induce vomiting; instantly call for medical help. Information for doctor: The following symptoms may occur: Allergic reactions Danger: Irritant effects by pasting.

5 Fire fighting measures

Suitable extinguishing agents CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam. For safety reasons unsuitable extinguishing agents: Water with a full water jet. Special hazards caused by the material, its products of combustion or flue Gases: Can be released in case of fire Hydrogen fluoride (HF) Hydrogen chloride (HCl) Protective equipment: Do not inhale explosion gases or combustion gases. Additional information: Cool endangered containers with water spray jet.

6 Accidental release measures:

Person-related safety precautions: Wear protective clothing. Ensure adequate ventilation Measures for environmental protection: No special measures required. Measures for cleaning /collecting: Allow to solidify. Collect mechanically.

7 Handling and storage

Handling Information for safe handling:

Ensure good ventilation/exhaustion at the workplace. Keep away from heat and direct sunlight. Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air). Information about protection against explosions and fires: Keep ignition sources away - do not smoke. Beware: Container is pressurized. Keep away from direct sun exposure and Temperatures over 50 °C. Do not open by force or throw into fire even after use.

Storage

Requirements to be met by store rooms and containers:

Observe official regulations on storing packaging with pressurized containers.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Protect from heat and sunlight.

Best storage temperatures: 18-22 °C

Storage class:

Class according to regulation on inflammable liquids: Void

8 Exposure controls and personal protection

Additional information about design of technical systems: No further data; see item 7 Components with critical values that require monitoring at the workplace: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues (5- 10%) TLV:O. 05 mg/m³, 0.005 ppm 11 5-10-6-dimethyl ether (2.5 - 10%) TLV: 1910 mg/m³, 1000 mg/m³ 106-97-8 butane, pure (2.5 - 10%) TLV: 2350 mg/m³, 1000 mg/m³ Additional information: The lists that were valid during the compilation were used as basis.

Personal protective equipment General protective and hygienic measures: Avoid contact with the skin. The usual precautionary measures should be adhered to in handling the chemicals. Breathing equipment: not necessary if room is well ventilated. Protection of hands: protective gloves. Eye protection: Safety glasses Body protection: Protective work clothing.

9 Physical and Chemical properties:

Form: Liquid (liquefied) in pressurized container

Colour: Light yellow

Smell: Weak, characteristic

Change in condition Melting point/ Melting range: Boiling point / Boiling range:

Flash point:

Ignition temperature:

Decomposition temperature: The cured foam may decompose at Temperatures above 100 °C At Temperatures Above 300 °C self- ignition is possible.

Self - inflammability:

Danger of explosion: Product is not explosive. However, formation of Explosive air / steam mixtures is possible.

Critical values for explosion: Lower: Upper:

Steam pressure: Density:

Solubility in / miscibility with
Water

10 stability and reactivity

Value/Range Unit Method Not applicable as aerosol. Not applicable as aerosol

Not applicable as aerosol

Propellant 230 °C,

Product is not self-igniting.

Applicable for the propellant

1.5 Vol %

18.6 Vol%

At 20 deg. C

At 20 °C

5.5-6 bar

1.0-1.2 g/cm³

Not miscible or difficult to mix

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

Dangerous reactions: Increasing inside pressure due warming up. Danger of bursting by overheating. Dangerous

products of composition: Hydrogen Chloride (HC 1) Hydrogen fluoride (HF) (At combustion)

11 Toxicological information

Acute toxicity: LD/LC50 values that are relevant for classification:

Components	Type	Value	Species
Diphenylmethane diisocyanate, isomers and Homologues	oral	5 000 mg/kg	rat
Inhalative		ca. 0.49 mg/1/4h	rat

Primary irritant effect: On the skin: Irritant for skin when pasting. On the eye: Dangerous when pasting. Irritant effect ... danger of pasting. Sensitization possible by inhalation. Not applicable for the cured foam.

12 Ecological information:

General notes: Water hazard class 0 (self - assessment): generally not hazardous for water.

13 Disposal Considerations

Product: Waste disposal key number: European Waste Code: 2001 05 Metal container with harmful residues.

Uncleaned packaging:

Recommended cleaning agent: Hago Polyurethane Cleaner

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)
ADR/RID-GGVS/E Class: 2 Gases that are compressed, liquefied or dissolved under pressure.

Number / Letter: 5 F ADR

UN Number:

1950

Designation of goods: Aerosols

Remarks in the documents of transport according to RN 2201 a: limited quantities

Maritime transport IMDG/ GgvSea:

MI3G/GGVSea Class:

9

UN Number

1950

EMS Number

2-13

MFAG

370

Correct technical name

Aerosols

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class:

2.1

UN/I D Number:

1950

Correct technical name

Aerosols, flammable, n.o.s / containing
Substances in division 6 .1 packing group 111

15 Regulatory information

Designation according to EC guidelines: The product has been labelled in accordance with EC Directives relevant national laws.

Code letter and hazard designation of product:

Xn Harmful

F+ Extremely Flammable

Hazard- determining components of labelling:

Highly flammable liquids and propellants.

Diphenylmethane-4, 4-di-isocyanate

Risk phrases:

R 36/37/38 irritating to eyes, respiratory system and skin

R 42

May cause sensitisation by inhalation

R 12 extremely flammable

Safety phrases: S 37 Wear suitable gloves S 39 Wear eye protection S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 28 After contact with skin, wash immediately with plenty of water and soap. S 45 In case of accident or if you feel unwell, seek medical advice Immediately (Show label where possible)

Special designation of certain preparations: Pressurized container. Protect from sunlight and do not expose to Temperatures exceeding 50 °C. do not replace or burn, even after use. Do not Spray onto a naked flame or any incandescent object. Without adequate Ventilation formation of explosive mixtures may occur. Keep away from sources of ignition - no smoking. Keep out of reach of children. Contains isocyanates. See information supplied by the manufacturer.

National regulations

Water hazard class: Water hazard class 0 (self -assessment): generally not hazardous for water.

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. 20125

