

SAFETY DATA SHEET

According to Annex II to REACH - Regulation 2015/830

BR02 - BR03

One-component polyurethane foam

Revision n. 02

Dated 10/03/2021

Printed on 10/03/2021

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1 - Identification of the substance/mixture and of the company/undertaking

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

Application of the substance / the mixture	BR02	One-component polyurethane foam IN GUN CAN
	BR03	One-component polyurethane foam IN MANUAL CAN

1.3. Details of the supplier of the safety data sheet

Name	Tecfi S.p.A.
Full Address	S.S.Appia km 193
District and Country	81050 Pastorano (CE) - Italia - tel. 0823 88 3338 - fax 0823 - 883260
e-mail (of the competent person responsible for the Safety Data Sheet)	rdc@tecfi.it

1.4. Emergency telephone number

For urgent inquiries refer to	Osp. NIGUARDA CA' GRANDA – Milano 02/66101029 CAV Policlinico "A. Gemelli" - Roma 06/3054343 Osp. "A. Cardarelli" - Napoli 081/7472870
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2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Aerosol 1	H222-H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
Acute Tox. 4	H332	Harmful if inhaled.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Carc. 2	H351	Suspected of causing cancer.
Lact.	H362	May cause harm to breast-fed children.
STOT SE 3	H335	May cause respiratory irritation.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 4	H413	May cause long lasting harmful effects to aquatic life.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

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



GHS07
Harmful

GHS08
Health hazard

GHS02
Flammable

Signal word Danger

Hazard-determining components of labelling:
diphenylmethanediisocyanate, isomers and homologues
alkanes, C14-17, chloro

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Hazard statements:

H222 - H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
H331	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.
H362	May cause harm to breast-fed children.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H413	May cause long lasting harmful effects to aquatic life.

Precautionary statements:

P102	Keep out of reach of children.
P201	Obtain special instructions before use.
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.
P260	Do not breathe vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection.
P284	In case of inadequate ventilation wear respiratory protection (a protective mask with an appropriate gas filter - i.e. type A1 according to standard EN 14387).
P302+P352	IF ON SKIN: Wash with plenty of water/soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	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.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of container to in accordance with local/regional/national/international regulation.
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. Contains isocyanates. May produce an allergic reaction.

2.3. Other hazards

Results of PBT and vPvB assessment: Not applicable.

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3. Composition/information on ingredients

3.1. Chemical characterisation: Mixtures

Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 9016-87-9	DIPHENYLMETHANEDIISOCYANATE, ISOMERES 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 <u>Specific concentration limits:</u> Skin Irrit. 2; H315: C ≥ 5 % Eye Irrit. 2; H319: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0,1 % STOT SE 3; H335: C ≥ 5 %	25-30%
CAS: 85535-85-9 EINECS: 287-477-0 Reg.nr.: 01-2119519269-33	ALKANES, C14-17, CHLORO ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Lact., H362	1-5%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	ISOBUTANE ⚠ Flam. Gas 1, H220; Press. Gas (Comp.), H280	10-15%
CAS: 115-10-6 EINECS: 204-065-8 Reg.nr.: 01-2119472128-37	DIMETHYL ETHER ⚠ Flam. Gas 1, H220; Press. Gas (Comp.), H280	1-10%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21- xxxx	PROPANE ⚠ Flam. Gas 1, H220; Press. Gas (Comp.), H280	1-10%

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

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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.

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: Immediately wash with water and soap and rinse thoroughly.

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

After swallowing: If symptoms persist consult doctor.

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: Foam

5.2. Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

Hydrogen cyanide (HCN)

5.3. Advice for firefighters

Protective equipment: Mouth respiratory protective device.

Additional information: Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources.
Ensure adequate ventilation
Wear protective equipment.
Keep unprotected persons away.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

6.4. Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Ensure that suitable extractors are available on processing machines
Ensure good ventilation/exhaustion at the workplace.
Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

7.2. Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:
Store only in the original receptacle.
Observe official regulations on storing packagings with pressurised containers.
Information about storage in one common storage facility: Store away from oxidising agents.
Further information about storage conditions:
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting. Protect from humidity and water.
Keep container tightly sealed.

7.3. Specific end use(s)

No further relevant information available.

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8. Exposure controls/personal protection

8.1. Control parameters

Additional information about design of technical facilities: No further data; see item 7.

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/m³

Long-term value: 0,02 mg/m³

Sen; as -NCO

CAS: 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.

8.2. Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

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 according to EN 374

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

Material of 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:



Wear airtight protective goggles EN 166

Body protection: Protective work clothing EN 13688

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9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Information

Appearance	Aerosol
Colour	According to product specification
Odour	Characteristic
Odour threshold	Not determined
pH-value	Not determined

Change in condition

Melting point/freezing point:	Undetermined
Initial boiling point and boiling range	Not applicable, as aerosol
Flash point	Not applicable, as aerosol
Flammability (solid, gas)	Not applicable
Ignition temperature	199 °C
Decomposition temperature	Not determined
Auto-ignition temperature	Product is not selfigniting
Explosive properties	Not determined

Explosion limits:

Lower	3,0 Vol %
Upper	18,6 Vol %
Vapour pressure	Not determined
Density	Not determined
Relative density	Not determined
Vapour density	Not determined
Evaporation rate	Not applicable
Solubilità in/Miscibilità con acqua	Poco e/o non miscibile
Partition coefficient: n-octanol/water	Not determined

Viscosity

Dynamic	Not determined
Kinematic	Not determined
Solvent content: VOC (CE)	24,9 %

9.2. Other information

No further relevant information available

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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 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

No further relevant information available

10.6. Hazardous decomposition products

Hydrogen cyanide (prussic acid) / Carbon monoxide / Nitrogen oxides (NOx)

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity. Harmful if inhaled

LD/LC50 values relevant for classification

CAS: 115-10-6 dimethyl ether

Inhalative	LC50/4 h	308 mg/l (rat)
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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.

Subacute to chronic toxicity:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity

Based on available data, the classification criteria are not met

Carcinogenicity: Suspected of causing cancer

Reproductive toxicity: May cause harm to breast-fed children.

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

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12. Ecological information

12.1. Toxicity

Aquatic toxicity: No further relevant information available.

12.2. Persistence and degradability

No further relevant information available

12.3. Bioaccumulative potential

No further relevant information available

12.4. Mobility in soil

No further relevant information available

12.5. Additional ecological information:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.

12.6. Other adverse effects

No further relevant information available

13. Disposal considerations

Waste treatment methods

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

European waste catalogue

08 05 01*	waste isocyanates
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
15 01 10*	packaging containing residues of or contaminated by hazardous substances

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations

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14. Transport information

14.1 UN-Number	
ADR, IMDG, IATA	UN1950
14.2 UN proper shipping name	
ADR	1950 AEROSOL
IMDG	AEROSOLI
14.3 Transport hazard class(es)	
ADR	
Class	2 5F Gases
	Flammable liquids
Label	2.1
IMDG, IATA	
Class	2.1
Label	2.1
14.4 Packing group	
ADR, IMDG, IATA	Void
14.5 Environmental hazards:	
Marine pollutant:	No
14.6 Special precautions for user	
Warning:	Gases
EMS Number:	F-D,S-U
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	
Transport/Additional information:	
ADR	
Limited quantities (LQ)	1l
UN "Model Regulation"	UN1950, AEROSOL, 2.1

15. Regulatory information

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

No further relevant information available

15.2. Chemical safety assessment:

A Chemical Safety Assessment has not been carried out

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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.
- 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.
- H362 May cause harm to breast-fed children.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

- 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 - inhalation – 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
- Lact.: Reproductive toxicity – effects on or via lactation
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
- Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4