

Safety Data Sheet

according to Regulation (EC) Nr. 1907/2006 (REACH)

Print date: 25.06.2018

Revision number 2.0

Version date: 25.06.2018

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

1.1 Product identifier

- **Product name:** Technobase 2CB (Komponente A)
- **Product codes:** 16282, 16285, 16286

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

- **Identified uses of the substance or mixture**
Adhesive (2 component), professional use

1.3 Details of the supplier of the safety data sheet

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Felizenzell 9
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1.4 Emergency telephone number:

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2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) Nr. 1272/2008

Skin corrosion/irritation: Skin Irrit. 2 (H315)
Respiratory or skin sensitisation: Skin Sens. 1 (H317)
Serious eye damage/eye irritation: Eye Irrit. 2 (H319)
Acute toxicity (inhalative): Acute Tox. 4 (H332)
Respiratory or skin sensitisation: Resp. Sens. 1 (H334)
Specific target organ toxicity (single exposure): STOT SE 3 (H335)
Germ cell mutagenicity: Muta. 2 (H351)
Specific target organ toxicity (repeated exposure): STOT RE 2 (H373)
Contains isocyanates. May produce an allergic reaction. (EUH204)

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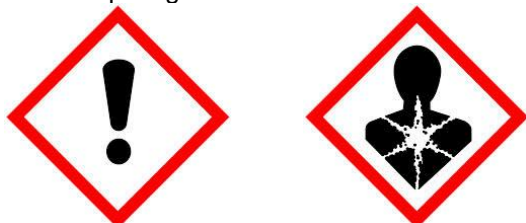
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2.2 Label elements

Label elements according to Regulation (EC) Nr. 1272/2008 (CLP/GHS)

Hazard pictograms



GHS07 - Exclamation mark GHS08 - Health hazard

Signal word

Danger

Hazard statements

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.
 EUH204 - Contains isocyanates. May produce an allergic reaction.

Precautionary statements

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P312 - Call a POISON CENTER/doctor if you feel unwell.
 P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
 P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
 P501 - Dispose of contents/container to waste disposal site in accordance with local/national regulations.

Others:

P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 - Wash hands thoroughly after handling.
 P271 - Use only outdoors or in a well-ventilated area.
 P272 - Contaminated work clothing should not be allowed out of the workplace.
 P284 - In case of inadequate ventilation wear respiratory protection.
 P302+P352 - IF ON SKIN: Wash with plenty of water and soap.
 P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P308+P313 - IF exposed or concerned: Get medical advice/attention.
 P314 - Get medical advice/attention if you feel unwell.
 P321 - Specific treatment (see on this label).
 P332+P313 - If skin irritation occurs: Get medical advice/attention.
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
 P337+P313 - If eye irritation persists: Get medical advice/attention.
 P362 + P364 - Take off contaminated clothing and wash it before reuse.
 P363 - Wash contaminated clothing before reuse.
 P405 - Store locked up.

2.3 Other hazards

· Reacts with water, releasing excess pressure or heat.



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3 Composition/information on ingredients

Chemical Characterization: Mixtures

Hazardous ingredients:

CAS: 68424-09-9 EC-Nr. 614-468-4	castor oil, polymer with 1,1'-methylenebis[4-isocyanatobenzene] Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H332) Resp. Sens. 1 (H334) STOT SE 3 (H335)	50-75 %
CAS: 101-68-8 EC-Nr. 202-966-0 Index: 615-005-00-9 REACH-Reg.-Nr. 01-2119457014-47-xxxx	4,4'-Methylenediphenyl diisocyanate Skin Irrit. 2 (H315) Skin Sens. 1(H317) Eye Irrit. 2 (H319) Acute Tox. 4 (H332) Resp. Sens. 1 (H334) STOT SE 3 (H335) Carc. 2 (H351) STOT RE 2 (H373) EUH204 Specific Conc. Limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0,1 % STOT SE 3; H335: C ≥ 5 %	25-50 %

Additional information:

The wording of the listed risk phrases and hazard statements refer to section 16.

4 First aid measures

4.1 Description of first aid measures

· General information:

As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing by an unconscious person.

· Inhalation:

Move to fresh air. If symptoms persist, call a physician.

· Skin contact:

Remove contaminated clothing immediately. Wash off immediately with soap and water and rinse thoroughly. If skin irritation occurs: Get medical advice / get medical attention.

· Eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

Remove contact lenses. In case of doubt or if symptoms persist, call a doctor.

· Ingestion:

Do not induce vomiting. Rinse out mouth and then drink plenty of water.

In case of doubt or if symptoms persist, call a doctor.



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4.2 Most important symptoms and effects, both acute and delayed

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Contains isocyanates. May produce an allergic reaction.

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 methods of extinction - In the event of a fire, use: sprayed water or water mist, foam, multipurpose ABC powder, BC powder, carbon dioxide (CO₂)

Unsuitable methods of extinction - In the event of a fire, do not use: water jet

5.2 Special hazards arising from the substance or mixture

Vapours may form explosive mixtures with air.

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health. Do not breathe in smoke. In the event of a fire, the following may be formed: carbon monoxide (CO), carbon dioxide (CO₂)

5.3 Advice for firefighters

Special protective equipment: Wear self-contained breathing apparatus and a chemical protection suit.

Further information

Cool endangered containers with water spray jet.

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

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Avoid eye and skin contact. Wear suitable personal protective equipment. Keep unprotected people away. Risk of slipping. Avoid breathing dust / fume / gas / mist / vapors / spray.

Consult the safety measures listed under headings 7 and 8.

6.2 Environmental precautions:

Prevent any material from entering drains or waterways. Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Contain and control the leaks or spills with absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal (see chapter 13).

6.4 Reference to other sections

Information regarding safe handling see chapter 7.

Information regarding personal protection see chapter 8.

Information regarding disposal see chapter 13.



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7 Handling and storage

7.1 Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges.

Keep away from foodstuffs, beverages and feed. Ensure good ventilation / exhaustion at the workplace. Do not inhale vapors / aerosols. Avoid eye and skin contact necessarily. Provide eyewash station and safety located near the processing area. Observe label and instructions for use. Use working methods according to operating instructions. Do not carry impregnated cleaning cloths in trouser pockets. When using do not eat, drink, smoke. Wash hands before breaks and at end of work. Protect skin by using skin protective cream.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures / storage conditions:

Cool, dry, and well-ventilated place.

Store locked up.

Do not keep at temperatures above 30 °C.

Keep away from sources of ignition.

Materials to be avoided: Alkalis, oxidising substances, acids.

7.3 Specific end use(s)

No further relevant information available.

8 Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

	Country	Exposure limit	ml/m ³	mg/m ³	Remarks
101-68-8 MDI (4,4'-Methylenediphenyl diisocyanate)	D, TRGS 900	AGW		0,05	1; =2=(I) DFG, 11, 12, Sa, Y
	A	MAK	0,005	0,05	8 h
	F	VLE	0,01	0,1	15 min
			0,01	0,1	8 h
	UK, WEL	TWA	0,02	0,2	15 min
			STEL		0,07

Biological limits

	Country	Limit, Remarks		
101-68-8 MDI (4,4'-Methylenediphenyl diisocyanate)	D, TRGS 903	BGW	10 µg/g(Keratin),	U, b
	UK	BMGV	1 µmol/mol	diamine, crea EH40/2005

8.2 Exposure controls / Personal protection

Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area. Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas. Keep away from foodstuffs, beverages and feed.



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Eye / face protection

Avoid contact with eyes. Use eye protectors designed to protect against liquid splashes. Before handling, wear safety goggles with protective sides in accordance with standard EN166. In the event of high danger, protect the face with a face shield. When spraying, wear a face shield in accordance with standard EN166. Prescription glasses are not considered as protection. Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours. Provide eyewash stations in facilities where the product is handled constantly.

Hand protection

Avoid contact with skin. Wash hands before breaks and at the end of work. Wear suitable protective gloves in the event of prolonged or repeated skin contact. Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374. Gloves must be selected according to the application and duration of use at the workstation.

Type of gloves recommended :

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

Skin protection (other than of the hands)

Work clothing worn by personnel shall be laundered regularly. After contact with the product, all parts of the body that have been soiled must be washed.

Respiratory protection

Do not inhale gases / fumes / aerosols. In case of insufficient ventilation wear suitable respiratory protection. Irritation of the respiratory tract by spray can never be ruled out. At occurrence of sprays appropriate safeguards required, such as effective ventilation and/or suitable respiratory masks that are adapted to the particle size.

Thermal hazards

No data available.

Exposure controls regarding environmental protection

No data available.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:

liquid

Colour:

white-yellow

· Odour:

characteristic

· Smell Threshold:

No data available

· pH:

No data available

· Change of state

Melting point/range:

No data available

Boiling point/range:

208 °C at 1013 hPa

· Flash point:

>200 °C

· Flammability (solid, gas):

not applicable

· Ignition temperature:

No data available

· Thermal decomposition:

No data available



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· Autoinflammability:	No data available
· Explosion hazard:	none
· Explosion limits:	
Lower:	No data available
Upper:	No data available
· Vapour pressure:	<5-10 mmHg at 25 °C
· Density:	1.15 g/cm ³
· Bulk density	not determined
· Vapour density	No data available
· Evaporation rate	No data available
· Solubility / miscibility	
Water:	No data available
· Partition coefficient (n-Octanol/Water):	No data available
· Viscosity:	No data available
· Oxidising properties	not applicable

9.2 Other information

No further relevant information available.

10 Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions. Reactivity with water.

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Polymerization can occur which could be catalyzed by strong bases and water.

10.4 Conditions to avoid:

Keep away from heat. Humidity.

10.5 Incompatible materials:

Oxidisers, Avoid contact with metals such as aluminum, brass, copper, galvanized metals, zinc. Reaction with water can generate carbon dioxide. Generation of gas can cause pressure build up in closed systems.

Avoid contact with acids, alcohol, amines, ammonia, bases, metal compounds, moist air, strong oxidizers, and water.

Avoid unintended contact with polyols.

10.6 Hazardous decomposition products:

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

Hazardous combustion products: see section 5.



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11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

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

Oral	LD50	>2000 mg/kg (Rat)
Derm.	LD50	>9400 mg/kg (Rabbit)
Inhal.	LC50	0,368 mg/l (Rat, 4 h)

Skin corrosion/irritation:

Causes skin irritation.

Eye damage/irritation:

Causes serious eye irritation.

Sensitisation, respiratory or skin:

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Carcinogenicity, germ cell mutagenicity, reproductive toxicity (CMR):

Suspected of causing cancer.

Specific target organ toxicity (STOT), single/repeated exposure:

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard:

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

12 Ecological information

12.1 Toxicity

Aquatic Toxicity:

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

LC50	>1000 mg/l	fish (96 h)
EC50	129,7 mg/l	aquatic invertebrates (24 h)
ErC50	>1640 mg/l	algae (3 d)
ErC50	>100 mg/l	microorganisms (3 h)

12.2 Persistence and degradability Data are not available.

12.3 Bioaccumulative potential Data are not available.

12.4 Mobility in soil Data are not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects Data are not available.



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13 Disposal considerations

13.1 Waste treatment methods

Must not be disposed together with household garbage. Do not allow product to reach sewage system. After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

Uncleaned packaging:

Must not be disposed together with household garbage. Contaminated packages must be completely emptied and can be reused after proper cleaning. Disposal according to official regulations.

14 Transport information

14.1 UN number	Not classified as dangerous good according to transport regulations
14.2 UN proper shipping name	none
14.3 Transport hazard class(es)	none
14.4 Packing group	none
14.5 Environmental hazards	none
14.6 Special precautions for user	none
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15 Regulatory information

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

EU-Regulations

Restriction according to REACH, Annex XVII, no. 56

1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtures in concentrations equal to or greater than 0,1 % by weight of MDI for supply to the general public, unless suppliers shall ensure before the placing on the market that the packaging:

(a) contains protective gloves which comply with the requirements of Council Directive 89/686/EEC (9);

(b) is marked visibly, legibly and indelibly as follows, and without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures:

'- 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.'

2. By way of derogation, paragraph 1(a) shall not apply to hot melt adhesives.

National Regulations

Germany: Wassergefährdungsklasse (WGK)

slightly hazardous to water (WGK 1), Classification according to AwSV

15.2 Chemical safety assessment: not applicable



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16 Other information

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Revision notes

* Changes since the last version

Abbreviations

WGK : Wassergefährdungsklasse (Water Hazard Class).

Title for H and EUH indications (Number and text)

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.

EUH204 - Contains isocyanates. May produce an allergic reaction.

Methods of evaluating information referred to in Article 9 of Regulation (EC) No 1272/2008 for the purpose of classification

Classification based on the components.