



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)
and Regulation (EU) No 2015/830

Revision date: 24/10/2016
Version: 4
Language: en-GB,IE
Date of print: 8/11/2016

Montageklebstoff

Material number MONT#

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

1.1 Product identifier

Trade name: Montageklebstoff
This safety data sheet pertains to the following product:
MONT.K310: Montageklebstoff

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

General use: Adhesive

1.3 Details of the supplier of the safety data sheet

Company name: GLUETEC Industrieklebstoffe GmbH & Co. KG
Street/POB-No.: Am Biotop 8a
Postal Code, city: 97259 Greußenheim
Germany
WWW: www.gluetec.de
E-mail: info@gluetec.de
Telephone: +49 (0)9369-98 36-0
Telefax: +49 (0)9369-98 36-10
Dept. responsible for information:
Department QS, Telephone: +49 (0)9369-98 36-0, E-mail: technik@gluetec.de

1.4 Emergency telephone number

GIZ-Nord, Göttingen, Germany,
Telephone: +49 551-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

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.
STOT SE 3; H335 May cause respiratory irritation.

2.2 Label elements

Labelling (CLP)



Signal word:

Danger



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Hazard statements:	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	H335	May cause respiratory irritation.
	H351	Suspected of causing cancer.
Precautionary statements:	P102	Keep out of reach of children.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection.
	P284	[In case of inadequate ventilation] wear respiratory protection.
	P302+P352	IF ON SKIN: Wash with plenty of water/soap.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor.
	P405	Store locked up.

Special labelling

EUH204 Contains isocyanates. May produce an allergic reaction.
Contains: 4,4'-Methylenediphenyl diisocyanate; 4,4'-Diphenylmethane diisocyanate (isomers, homologues); Diphenylmethane-2,4'-diisocyanate;
4-Isocyanatosulphonyltoluene; 2,2'-Methylenediphenyl diisocyanate

2.3 Other hazards

Persons with over-sensitive breath ways (e.g. asthma, chronic bronchitis) are not allowed to use the product due to safety regulations. Respiratory symptoms may still occur several hours after overexposure. Vapours and aerosols are the main dangers to the respiratory tract.

In case of strong heating: Danger of bursting container.

After contact with water: Formation of carbon dioxide, Danger of bursting container.

Special danger of slipping by leaking/spilling product.

Results of PBT and vPvB assessment:

No data available

SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable



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3.2 Mixtures

Hazardous ingredients:

Ingredient	Designation	Content	Classification
REACH 01-2119457014-47-xxxx EC No. 202-966-0 CAS 101-68-8	4,4'-Methylenediphenyl diisocyanate	< 5 %	Acute Tox. 4; H332. Skin Irrit. 2; H315. Eye Irrit. 2; H319. Resp. Sens. 1; H334. Skin Sens. 1; H317. Carc. 2; H351. STOT SE 3; H335. STOT RE 2; H373.
EC No. - CAS 9016-87-9	4,4'-Diphenylmethane diisocyanate (isomers, homologues)	< 5 %	Acute Tox. 4; H332. Skin Irrit. 2; H315. Eye Irrit. 2; H319. Resp. Sens. 1; H334. Skin Sens. 1; H317. Carc. 2; H351. STOT SE 3; H335. STOT RE 2; H373.
REACH 01-2119480143-45-xxxx EC No. 227-534-9 CAS 5873-54-1	Diphenylmethane-2,4'-diisocyanate	< 2.5 %	Acute Tox. 4; H332. Skin Irrit. 2; H315. Eye Irrit. 2; H319. Resp. Sens. 1; H334. Skin Sens. 1; H317. Carc. 2; H351. STOT SE 3; H335. STOT RE 2; H373.
REACH 01-2119457024-46-xxxx EC No. 500-079-6 CAS 32055-14-4	Formaldehyde, oligomeric reaction products with aniline and phosgene	< 2 %	Acute Tox. 4; H332. Skin Irrit. 2; H315. Eye Irrit. 2; H319. Resp. Sens. 1; H334. Skin Sens. 1; H317. Carc. 2; H351. STOT SE 3; H335. STOT RE 2; H373.
REACH 2119969278-20-xxxx EC No. 229-194-7 CAS 6425-39-4	2,2'-Dimorpholinyl-diethyl ether	< 2 %	Eye Irrit. 2; H319.
EC No. 223-810-8 CAS 4083-64-1	p-Toluenesulphonyl isocyanate	< 1 %	Skin Irrit. 2; H315. Eye Irrit. 2; H319. Resp. Sens. 1; H334. STOT SE 3; H335. (EUH014).
REACH 01-2119529238-36-xxxx EC No. 209-136-7 CAS 556-67-2	Octamethylcyclotetrasiloxane	< 0.5 %	Flam. Liq. 3; H226. Repr. 2; H361. Aquatic Chronic 4; H413.



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Ingredient	Designation	Content	Classification
REACH 01-2119927323-43-xxxx EC No. 219-799-4 CAS 2536-05-2	2,2'-Methylenediphenyl diisocyanate	< 0.2 %	Acute Tox. 4; H332. Skin Irrit. 2; H315. Eye Irrit. 2; H319. Resp. Sens. 1; H334. Skin Sens. 1; H317. Carc. 2; H351. STOT SE 3; H335. STOT RE 2; H373.

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General information: Remove immediately any soiled or soaked clothing and shoes for decontamination and disposal.
First aider: Pay attention to self-protection!
- In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or oxygen. Immediately get medical attention.
If victim is at risk of losing consciousness, position and transport on their side.
- Following skin contact: Take off immediately all contaminated clothing.
Immediately clean with water and soap and, if available, apply a generous amount of polyethylene glycol 400. In the event of discomfort seek medical treatment.
- After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Afterwards, consult an ophthalmologist immediately.
- After swallowing: Do not induce vomiting. If person is clearly conscious, have them drink two glasses of water to dilute ingested material. Never give anything by mouth to an unconscious person. Immediately get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment of the acute irritation or bronchial narrowing is mainly symptomatic. Depending on the scale of exposition, as well as aches and pains resulting, long-term medical care may be required.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media::

Water fog, alcohol resistant foam, carbon dioxide, extinguishing powder

Extinguishing media which must not be used for safety reasons:

Full water jet



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5.2 Special hazards arising from the substance or mixture

Emits toxic fumes under fire conditions.

In case of fire may be liberated: Isocyanate vapours, traces of hydrogen cyanide, nitrous fumes, carbon monoxide, phosphorus oxides

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Hazchem-Code: -

Reacts with water with development of heat, formation of gas. Danger of bursting container. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid exposure.

Provide adequate ventilation. Keep unprotected people away.

Wear appropriate protective equipment.

Avoid contact with the substance. Do not breathe vapours.

6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains. If necessary notify appropriate authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder.

Store in special closed containers and dispose of according to ordinance.

Additional information: Special danger of slipping by leaking/spilling product.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Obtain special instructions before use.

Use local exhaust in the field of the processing equipment.

Use caution when opening containers under pressure.

Avoid contact with skin and eyes. Do not breathe vapours. Wear appropriate protective equipment.

The product is to be handled with extreme caution.

Precautions against fire and explosion:

Keep away from sources of ignition. Take precautionary measures against static discharges.



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7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container dry, tightly closed and store at cool and aired place.
Protect from exposure to heat, direct sunlight, and cold. Protect from moisture contamination.

Only trained personnel may be allowed to enter storage area.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.
Do not store together with acids and strong oxidation agents.
Avoid contact with alcohol and amines .

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
101-68-8	4,4'-Methylenediphenyl diisocyanate	Great Britain: WEL-STEL	0.07 mg/m ³ (as -NCO)
		Great Britain: WEL-TWA	0.02 mg/m ³ (as -NCO)
		Ireland: 15 minutes	0.07 mg/m ³
		Ireland: 8 hours	0.02 mg/m ³
9016-87-9	4,4'-Diphenylmethane disocyanate (isomers, homologues)	Great Britain: WEL-STEL	0.07 mg/m ³ (as -NCO)
		Great Britain: WEL-TWA	0.02 mg/m ³ (as -NCO)

DNEL/DMEL:

Information about 4,4'-Methylenediphenyl diisocyanate:

Systemic effects:

DNEL Short-term, workers, dermal: 50 mg/kg bw/d

DNEL Short-term, workers, inhalative: 0.1 mg/m³

DNEL Long-term, workers, inhalative: 0.05 mg/m³

DNEL Short-term, consumers, dermal: 25 mg/kg bw/d

DNEL Short-term, consumers, inhalative: 0.05 mg/m³

DNEL Short-term, consumers, oral: 20 mg/kg bw/d

DNEL Long-term, consumers, inhalative: 0.025 mg/m³

DNEL Short-term, consumers, inhalative: 0.05 mg/m³

Local effects:

DNEL Short-term, workers, dermal: 28.7 mg/cm²

DNEL Short-term, workers, inhalative: 0.1 mg/m³

DNEL Long-term, workers, inhalative: 0.05 mg/m³

DNEL Short-term, consumers, dermal: 17.2 mg/kg bw/d

DNEL Short-term, consumers, inhalative: 0.05 mg/m³

DNEL Long-term, consumers, inhalative: 0.025 mg/m³



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PNEC: Information about 4,4'-Methylenediphenyl diisocyanate:
PNEC Water (freshwater): 1 mg/L
PNEC Water (marine water): 0.1 mg/L
PNEC Water (intermittent release): 10 mg/L
PNEC Soil: 1 mg/kg dw
PNEC STP: 1 mg/L

8.2 Exposure controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment.

Educate and train employees in safe use of product.

Personal protection equipment

Occupational exposure controls

Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded. Respiratory protective device with Use combination filter type A2 according to EN 14387. For short or minimal exposure: respiratory filter; in cases of longer exposure: supplied air respirator.

Hand protection: Protective gloves according to EN 374.
Glove material: Nitrile rubber - Layer thickness: 0.8 mm penetration time 15 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN 166.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:
Obtain special instructions before use.
Wash hands before breaks and after work.
Immediately remove all contaminated clothing. Keep work clothes separately. Remove immediately any soiled or soaked clothing and shoes for decontamination and disposal. Once a person is diagnosed as sensitized to the Product, no further exposure can be permitted.
Work place should be equipped with a shower and an eye rinsing apparatus.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Form: pasty
Colour: beige

Odour: characteristic

Odour threshold: No data available

pH value: No data available

Melting point/freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point/flash point range: > 100 °C

Evaporation rate: No data available

Flammability: No data available

Explosion limits: LEL (Lower Explosion Limit): 0.40 Vol-%

Vapour pressure: No data available



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Vapour density:	No data available
Density:	at 20 °C: 1.43 g/mL
Water solubility:	insoluble, reacts with water
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	not explosive
Oxidizing characteristics:	No data available

9.2 Other information

Ignition temperature: 400 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

Refer to 10.3

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Reactions with alcohols, amines, liquid acids and bases.
Contact with water liberates carbon dioxide. Danger of bursting container.

10.4 Conditions to avoid

Protect from moisture contamination. Protect from exposure to heat, direct sunlight, and cold.
Avoid ignitable vapour-air-mixtures.

10.5 Incompatible materials

Avoid contact with alcohol, amines, humidity and strong oxidizing agents.

10.6 Hazardous decomposition products

In case of fire: Isocyanate vapours, traces of hydrogen cyanide, nitrous fumes, carbon monoxide, phosphorus oxides

Thermal decomposition: No data available



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects: Acute toxicity (oral): Lack of data.
Acute toxicity (dermal): Lack of data.
Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
ATEmix (calculated): ATE > 20 mg/l
Skin corrosion/irritation: Skin Irrit. 2; H315 = Causes skin irritation.
Eye damage/irritation: Eye Irrit. 2; H319 = Causes serious eye irritation.
Sensitisation to the respiratory tract: Resp. Sens. 1; H334 = May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation: Skin Sens. 1; H317 = May cause an allergic skin reaction.
Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Carc. 2; H351 = Suspected of causing cancer.
Reproductive toxicity: Based on available data, the classification criteria are not met.
Effects on or via lactation: Lack of data.
Specific target organ toxicity (single exposure): STOT SE 3; H335 = May cause respiratory irritation.
Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.

Other information: Information about 4,4'-Methylenediphenyl diisocyanate:
LD50 Rat, oral: 9200 mg/kg
LD50 Rabbit, dermal: >10000 mg/kg
LC50 Rat, inhalative: 490 mg/m³/4h
Information about 4,4'-Diphenylmethane diisocyanate (isomers, homologues):
LD50 Rat, oral: >2000 mg/kg
LC50 Rat, inhalative: 490 mg/m³/4h

Symptoms

Product causes irritation of respiratory tracts and may possibly increase sensitivity of skin and respiratory tracts.
In case of inhalation: Irritant. Respiratory complaints, cough.
High concentrations of vapours irritate the eyes and mucous membranes.
Susceptible persons may develop ailments and allergic reactions with some delay.
After eye contact:
High concentrations of vapours irritate the eyes and mucous membranes.
Conjunctival redness and swelling of the conjunctive tissues. Risk of corneal clouding.

SECTION 12: Ecological information

12.1 Toxicity

Further details: No data available

12.2. Persistence and degradability

Further details: No data available



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12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

General information: Do not allow to penetrate into soil, waterbodies or drains.

Forms carbon dioxide and turns into a hard and insoluble by-product (poly urea) on the water's edge. This reaction is intensified by surface-active substances (e.g. liquid soaps) or water soluble solvents. Based upon current knowledge, poly urea is inert and will not decompose.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 08 04 09* = Waste adhesives and sealants containing organic solvents or other dangerous substances

MFSU = manufacture, formulation, supply and use

* = Evidence for disposal must be provided.

Recommendation: Incinerate as hazardous waste according to applicable local, state, and federal regulations.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.

Additional information

Reacts with water, forming carbon dioxide, producing bursting hazard in closed containers due to build-up of pressure.

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR:

not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR:

not applicable



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14.4 Packing group

ADR/RID, IMDG, IATA-DGR:

not applicable

14.5 Environmental hazards

Marine pollutant:

no

14.6 Special precautions for user

Protect from humidity.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

SECTION 15: Regulatory information

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

National regulations - Great Britain

Hazchem-Code:

-

No data available

National regulations - EC member states

Volatile organic compounds (VOC):

1.25 % by weight

Labelling of packaging with <= 125mL content



Signal word:

Danger

Hazard statements:

H317

May cause an allergic skin reaction.

H334

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

H335

May cause respiratory irritation.

H351

Suspected of causing cancer.

Precautionary statements:

P102

Keep out of reach of children.

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

P280

Wear protective gloves/protective clothing/eye protection.

P284

[In case of inadequate ventilation] wear respiratory protection.

P302+P352

IF ON SKIN: Wash with plenty of water/soap.

P308+P311

IF exposed or concerned: Call a POISON CENTER/doctor.

P405

Store locked up.

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.



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SECTION 16: Other information

Further information

Wording of the H-phrases under paragraph 2 and 3:

H226 = Flammable liquid and vapour.

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.

H361 = Suspected of damaging fertility or the unborn child.

H373 = May cause damage to organs through prolonged or repeated exposure.

H413 = May cause long lasting harmful effects to aquatic life.

EUH014 = Reacts violently with water.

EUH204 = Contains isocyanates. May produce an allergic reaction.

Reason of change: Changes in section 3: Change of composition
General revision

Date of first version: 13/8/2014

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.