

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.01.2017

Version number 2

Revision: 02.09.2014

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

- 1.1 Product identifier

- Trade name: **Köracur TH 650 - Komp.B**

- Article number: R045018-00

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

- **Application of the substance / the mixture** Hardening agent/ Curing agent

- 1.3 Details of the supplier of the safety data sheet

- **Manufacturer/Supplier:**

Kömmerling Chemische Fabrik GmbH
Zweibrücker Straße 200
D-66954 Pirmasens
Tel.: +49 (0)6331/56-2000
www.koe-chemie.de

- **Informing department:**

Abteilung: C-U Qualitäts- und Umweltmanagementcenter
(department: C-U Quality- and Environmentalmanagementcenter)
Tel.: +49 (0)6331/56-2553; Fax.: +49 (0)6331/56-1091
e-Mail: Productsafety@Koe-Chemie.de

- **1.4 Emergency telephone number:**

In case of poisoning:
GBK-EMTEL International
Tel.(24h): +49(0)6132/84463 (all languages)

In case of transport accidents:
Tel.(24h): (001) 352 323 3500 (Infotrac - Contract ID: 90373 / GBK)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**

- **Classification according to Regulation (EC) No 1272/2008**

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.
STOT SE 3 H335 May cause respiratory irritation.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

- **Additional information:** The classification resulted from the calculation method of CLP-regulation.

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

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

(Contd. on page 2)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 25.01.2017

Version number 2

Revision: 02.09.2014

Trade name: Köracur TH 650 - Komp.B

(Contd. of page 1)

- Hazard pictograms


GHS07 GHS08

- Signal word Danger

- Hazard-determining components of labelling:

methylenediphenyl diisocyanate, isomeres and homologues

- Hazard statements

H332 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.

H335 May cause respiratory irritation.

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

- Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P260 Do not breathe mist/vapours/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P314 Get medical advice/attention if you feel unwell.

- Additional information:

EUH204 Contains isocyanates. May produce an allergic reaction.

- 2.3 Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.

- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients
- 3.1 Chemical characterisation: Substances
- CAS No. Designation:

9016-87-9 methylenediphenyl diisocyanate, isomeres and homologues

- Identification number(s):
- EC number: 618-498-9

- Index number: 615-005-00-9

- 3.2 Chemical characterisation: Mixtures
- Description: Mixture of several substances

- Dangerous components:

CAS: 9016-87-9 EC number: 618-498-9	methylenediphenyl diisocyanate, 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	75-100%
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(Contd. on page 3)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.01.2017

Version number 2

Revision: 02.09.2014

Trade name: Köracur TH 650 - Komp.B

(Contd. of page 2)

CAS: 32055-14-4 NLP: 500-079-6 Reg.nr.: 01-2119457024-46-xxxx	formaldehyde, oligomeric reaction products with aniline and phosgene Resp. Sens. 1, H334; Carc. 2, H351; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	< 10%
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- **SVHC** Doesn't contain SVHC-substances
- **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures

- After inhalation

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness bring patient into a stable side position for transport.

- After skin contact

Treat affected skin with cotton wool or cellulose. Then wash and rinse thoroughly with water and a mild cleaning agent.

- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.

- **After swallowing** Do not induce vomiting; call for medical help immediately.

- 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.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media

- Suitable extinguishing agents

Water spray

Alcohol-resistant foam

Fire-extinguishing powder

Carbon dioxide

- **For safety reasons unsuitable extinguishing agents** Water with full jet.

- 5.2 Special hazards arising from the substance or mixture

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

- 5.3 Advice for firefighters

- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Use respiratory protective device against the effects of fumes/dust/aerosol.

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.

- 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.

GB

(Contd. on page 4)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.01.2017

Version number 2

Revision: 02.09.2014

Trade name: Köracur TH 650 - Komp.B

(Contd. of page 3)

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
 - Protect from frost.
 - Keep receptacle tightly sealed.
 - Protect from heat and direct sunlight.
 - Store receptacle in a well ventilated area.
 - Store in dry conditions.
- **Storage class (according german VCI-concept):** 10
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**

- Components with limit values that require monitoring at the workplace:**9016-87-9 methylenediphenyl diisocyanate, isomeres and homologues**

WEL (Great Britain)	Short-term value: 0.07 mg/m ³
	Long-term value: 0.02 mg/m ³
	Sen; as -NCO

- Additional information:

The homogeneous mixing of this product is guaranteed through continuous physical tests. What were formerly dusty raw materials are completely integrated into the liquid/pasty mass. Potential threshold limit values (maximum concentration values at the workplace) of solid substances are therefore not named, because the risk of inhalation of these substances (during handling of this mixture) is not anymore given.

- 8.2 Exposure controls**- Personal protective equipment****- General protective and hygienic measures**

The usual precautionary measures should be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of the work.

Immediately remove all soiled and contaminated clothing

- Breathing equipment:

Not required with good ventilation and/or adequate extractor facilities

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Short term filter device:

A2 (DIN EN 14387 / DIN EN 141)

- Protection of hands:

Direct contact with the chemical preparation must be avoided by organizational measures. Apply skin protectant before working with gloves to avoid skin swellings and use a skin cleansing and skincare product after the work.

Compliance with the stated penetration time (starts with the first product contact) must be ensured!

The gloves need to be disposed of after the penetration time and new gloves used!

(Contd. on page 5)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 25.01.2017

Version number 2

Revision: 02.09.2014

Trade name: Köracur TH 650 - Komp.B

(Contd. of page 4)

- **For the permanent contact gloves made of the following materials are suitable:**
If longer exposure to the chemical preparation is necessary, a sturdy overglove against mechanical strain is recommended in combination with the "Barrier 02-100" underglove from Ansell (penetration time 480 min).
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
Nitrile rubber (0.8 mm - penetration time 15 min)
- **As protection from splashes gloves made of the following materials are suitable:**
Recommended for protection from splashes: disposable nitrile gloves (minimum thickness 0.12 mm) with long cuffs. After contact with the chemical preparation, take the disposable nitrile glove off immediately and put on a new disposable nitrile glove.
- **Eye protection:** Safety glasses

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information

- Appearance:

Form:	Fluid
Colour:	Brown
- Odour:	Characteristic
- Odour threshold:	Not determined.

- Change in condition

Initial boiling point and boiling range: Not determined

- Flash point: > 200 °C

- Ignition temperature: > 400 °C

- Explosion limits:

Lower:	Not determined
Upper:	Not determined

- Vapour pressure at 25 °C: < 0.0001 hPa

- Specific gravity at 20 °C: 1.23 g/cm³

- Vapour density: Not determined.

- Evaporation rate: Not determined.

- Solubility in / Miscibility with

Water: Insoluble
reacts with water

- Partition coefficient: n-octanol/water: Not determined.

- Viscosity:

dynamic at 20 °C: 250 mPas (Brookfield)

- Solvent content:

VOC (EU): 0.00 %

VOC (CH): 0.00 %

- 9.2 Other information: No further relevant information available.

GB

(Contd. on page 6)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.01.2017

Version number 2

Revision: 02.09.2014

Trade name: Köracur TH 650 - Komp.B

(Contd. of page 5)

SECTION 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**
Reacts with alcohols, amines, aqueous acids and alkalis.
Reacts with water forming carbon dioxide. In closed containers there is a danger of bursting, due to build up of pressure.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
In case of fire, the following substance(s) may occur:
Nitrogen oxides
- **Additional information:** Open and release pressure carefully with pressurised containers

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects

- **Acute toxicity**
Harmful if inhaled.

- LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimates)

Inhalative	LC50/4 h	11 mg/l
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9016-87-9 methylenediphenyl diisocyanate, isomeres and homologues

Inhalative	LC50/4 h	11 mg/l (ATE)
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32055-14-4 formaldehyde, oligomeric reaction products with aniline and phosgene

Inhalative	LC50/4 h	11 mg/l (ATE)
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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.
- **CMR effects (carcinogenity, 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** Based on available data, the classification criteria are not met.
- **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.

GB

(Contd. on page 7)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.01.2017

Version number 2

Revision: 02.09.2014

Trade name: Köracur TH 650 - Komp.B

(Contd. of page 6)

SECTION 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.
- **Additional ecological information:**
- **General notes:** Do not allow product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Disposal in accordance with official regulations
- **EWC-Code(s):**

To be treated as industrial waste: do not dispose of in or on soil, in watercourses or bodies, or through a sewage system. These EU refuse code numbers are recommendations for waste accruing through the use of adhesives and sealants. Any waste produced from organic solvents or other dangerous substances listed under item 3 of this safety datasheet is itself classified as dangerous (*).

Waste accruing during application:

080409* waste adhesives and sealants containing organic solvents or other dangerous substances
080410 waste adhesives and sealants other than those mentioned in 080409

Waste accruing during cleaning:

08 04 11* adhesive and sealant sludges containing organic solvents or other dangerous substances
08 04 12 adhesive and sealant sludges other than those mentioned in 080411

Soiled waste packaging:

15 01 10* packaging containing residues of or contaminated by dangerous substances.

Clean waste packaging:

15 01 01 paper and cardboard packaging
15 01 02 plastic packaging
15 01 04 metallic packaging

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---------------------------------------|------|
| - 14.1 UN-Number | |
| - ADR/RID/ADN, ADN, IMDG, IATA | Void |
| - 14.2 UN proper shipping name | |
| - ADR/RID/ADN, ADN, IMDG, IATA | Void |

(Contd. on page 8)

GB

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.01.2017

Version number 2

Revision: 02.09.2014

Trade name: Köracur TH 650 - Komp.B

(Contd. of page 7)

- 14.3 Transport hazard class(es)	
- ADR/RID/ADN, ADN, IMDG, IATA	
- Class	Void
- 14.4 Packing group	
- ADR/RID/ADN, IMDG, IATA	Void
- 14.5 Environmental hazards:	
- Marine pollutant:	No
- 14.6 Special precautions for user	Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
- Transport/Additional information:	Protect from moisture
- IATA	
- Remarks:	not restricted
- UN "Model Regulation":	Void

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- National regulations
- Information about limitation of use:
Employment restrictions concerning young persons must be observed.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

For industrial use only.

- Legend of H- and R-phrases, concerning the in chapter 3 mentioned substances (marking of product please see chapter 2)
 - 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.
- Department issuing SDS:
- Abbreviations and acronyms:
 - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 - ICAO: International Civil Aviation Organisation

(Contd. on page 9)

GB

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.01.2017

Version number 2

Revision: 02.09.2014

Trade name: Köracur TH 650 - Komp.B

(Contd. of page 8)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – 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

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

- * **Data compared to the previous version altered.**

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