

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**KÖSTER IN 5 B**

Revision date: 08.05.2015

Product code: IN250b

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

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

for professional use only Building and construction work.

**Uses advised against**

No identified use(s).

**1.3. Details of the supplier of the safety data sheet**

Company name:	KOESTER BAUCHEMIE AG	
Street:	Dieselstrasse 1 - 10	
Place:	D-26607 Aurich	
Telephone:	+49-4941-9709-0	Telefax: +49-4941-9709-40
e-mail (Contact person):	produktsicherheit@koester.eu	
Internet:	www.koester.eu	
Responsible Department:	Forschung & Entwicklung	

**1.4. Emergency telephone number:** +49-551-19240 (24 h, Giftinformationszentrum Nord)**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Resp. Sens. 1

Respiratory or skin sensitisation: Skin Sens. 1

Carcinogenicity: Carc. 2

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements:

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

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

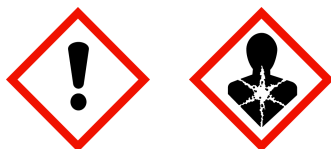
May cause respiratory irritation.

Suspected of causing cancer.

May cause damage to organs through prolonged or repeated exposure.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate

**Signal word:** Danger**Pictograms:**

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

### Precautionary statements

P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P285	In case of inadequate ventilation wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P362	Take off contaminated clothing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Isocyanate containing product.

#### Hazardous components

CAS No	Chemical name	Quantity
	EC No	Index No
		REACH No
	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	< 20 %
	202-966-0	615-005-00-9
	Carc. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H351 H332 H315 H319 H334 H317 H335 H373	

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### After inhalation

Provide fresh air. In case of breathing difficulties administer oxygen. Medical treatment necessary.

#### After contact with skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
Medical treatment necessary.

#### After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

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**After ingestion**

Rinse mouth immediately and drink plenty of water.  
Caution if victim vomits: Risk of aspiration!

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

High power water jet.

**5.2. Special hazards arising from the substance or mixture**

The product itself does not burn.

**5.3. Advice for firefighters**

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

**Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.  
Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Further information on handling**

Due to gaseous decomposition products, overpressure can occur in tightly sealed containers.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. Protect from sunlight. Store in a well-ventilated place.

**7.3. Specific end use(s)****SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

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#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
-	Isocyanates, all (as -NCO) Except methyl isocyanate	-	0.02		TWA (8 h)	WEL
		-	0.07		STEL (15 min)	WEL

#### Additional advice on limit values

Preventive industrial medical examinations are to be offered.

#### 8.2. Exposure controls

##### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

##### Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

##### Eye/face protection

Tightly sealed safety glasses.

##### Hand protection

Tested protective gloves are to be worn: Suitable material: NBR (Nitrile rubber). Breakthrough times and swelling properties of the material must be taken into consideration.

##### Skin protection

Wear suitable protective clothing.

##### Respiratory protection

Respiratory protection necessary at: insufficient ventilation. gas filtering equipment (EN 141).

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	brown
Odour:	characteristic

#### Changes in the physical state

Melting point: < 0 °C

Flash point: > 100 °C

#### Explosive properties

not explosive.

#### Oxidizing properties

Not oxidizing.

Vapour pressure: 0,0001 hPa

Density: 1,1 g/cm<sup>3</sup>

Water solubility: not miscible

Viscosity / dynamic:  
(at 23 °C) 300 mPa·s

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts with : Water. Formation of: Carbon dioxide.

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**10.2. Chemical stability**

No risks worthy of mention.

**10.3. Possibility of hazardous reactions**

Exothermic reactions with: Alcohols. amines. hazardous polymerization.

**10.4. Conditions to avoid**

Protect from sunlight. Store in a well-ventilated place.

**10.5. Incompatible materials**

No risks worthy of mention.

**10.6. Hazardous decomposition products**

Carbon dioxide.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No information available.

**Acute toxicity**

Acute toxicity, inhalant.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate				
	oral	LD50 mg/kg	9200	Rat	GESTIS
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		

**Irritation and corrosivity**

Irritating to eyes. Following inhalation: Lung irritation. Coughing. shortage of breath. After skin contact: irritant.

Following eye contact: irritant.

After skin contact: irritant.

In rare cases the product can cause temporary erythema of the skin.

**Sensitising effects**

May cause sensitization by inhalation and skin contact.

**Carcinogenic/mutagenic/toxic effects for reproduction**

May cause cancer.

**STOT-repeated exposure**

Danger of serious damage to health by prolonged exposure.

**Specific effects in experiment on an animal**

No information available.

**Additional information on tests**

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

**SECTION 12: Ecological information****12.1. Toxicity**

No harm to water organisms up to the tested concentration.

**12.2. Persistence and degradability**

Hydrolysis to bindings insoluble in water. Product is not easily biodegradable.

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#### **12.3. Bioaccumulative potential**

No indication of bioaccumulation potential. Does not accumulate in organisms.

#### **12.4. Mobility in soil**

No information available.

#### **12.5. Results of PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

#### **Further information**

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

### **SECTION 13: Disposal considerations**

#### **13.1. Waste treatment methods**

##### **Advice on disposal**

Dispose of waste according to applicable legislation.

##### **Contaminated packaging**

Water (with cleaning agent). Completely emptied packages can be recycled.

### **SECTION 14: Transport information**

#### **Land transport (ADR/RID)**

##### **Other applicable information (land transport)**

No dangerous good in sense of these transport regulations.

#### **Inland waterways transport (ADN)**

##### **Other applicable information (inland waterways transport)**

No dangerous good in sense of these transport regulations.

#### **Marine transport (IMDG)**

##### **Other applicable information (marine transport)**

No dangerous good in sense of these transport regulations.

#### **Air transport (ICAO-TI/IATA-DGR)**

##### **Other applicable information (air transport)**

No dangerous good in sense of these transport regulations.

### **SECTION 15: Regulatory information**

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

##### **EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 56: 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate

2004/42/EC (VOC): 18 % (198 g/l)

##### **National regulatory information**

Water contaminating class (D): 1 - slightly water contaminating

### **SECTION 16: Other information**

#### **Relevant H and EUH statements (number and full text)**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

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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.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*