



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

Printing date 25.08.2011

Version-No. 5

Revision: 29.06.2011

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

· Product identifier

- Trade name / Article-No: **KLEIBERIT Reactive HotMelt PUR 706.1**
- Relevant identified uses of the substance / mixture or uses advised against
 - Application of the substance / the preparation Adhesives

· Details of the supplier of the safety data sheet**· Manufacturer/Supplier:**

KLEBCHEMIE
M.G.Becker GmbH & Co. KG
Max Becker Str. 4
D - 76356 Weingarten / Baden

Germany

· Further information obtainable from:

Telefon: +49-(0)7244-62-0
FAX: +49-(0)7244-700-0

- **Emergency telephone number:** hse@kleiberit.com

2 Hazards identification

· Classification of the substance or mixture

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

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2 H351 Suspected of causing cancer.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xn; Harmful

R40: Limited evidence of a carcinogenic effect.

Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.

· Label elements

- **Labelling according to Directive 67/548/EEC or Directive 1999/45/EC**

- **Code letter and hazard designation of product:**



Xn Harmful

- **Hazard-determining components of labelling:**

diphenylmethane-4,4'-diisocyanate

- **Risk phrases:**

40 Limited evidence of a carcinogenic effect.

42/43 May cause sensitisation by inhalation and skin contact.

- **Safety phrases:**

23 Do not breathe vapour/aerosol.

24 Avoid contact with skin.

37 Wear suitable gloves.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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- **Special labelling of certain preparations:**

Contains isocyanates. See information supplied by the manufacturer.

- 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.

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** mixture of synthetic plastics, based on polyurethane

- **Dangerous components:**

CAS-No	Description	Index	R-phrases	%
CAS: 101-68-8	diphenylmethane-4,4'-diisocyanate			< 2,5%
Reg.nr.: 01-2119457014-47-XXXX	Xn R20-40-48/20; Xn R42/43; Xi R36/37/38			
	Carc. Cat. 3			
	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			

4 First aid measures

- **Description of first aid measures**

- **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:**

After contact with the molten product, cool rapidly with cold water.

If skin irritation continues, consult a doctor.

- **After eye contact:**

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

- **After swallowing:** Seek medical treatment.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed**

Asthma attacks

Allergic reactions

- **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Firefighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **For safety reasons unsuitable extinguishing agents:** None

- **Special hazards arising from the substance or mixture**

Nitrogen oxides (NO_x)

Isocyanates

Traces:

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Hydrogen cyanide (HCN)

· **Advice for firefighters**

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

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

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

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.· **Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

Pick up mechanically.

· **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

· **Handling:**

- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.

- **Information about fire - and explosion protection:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**· **Storage:**

- **Requirements to be met by storerooms and receptacles:** Keep container tightly closed.

- **Further information about storage conditions:** Protect from humidity and water.

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.· **Control parameters**· **Ingredients with limit values that require monitoring at the workplace:**

CAS No.	Designation of material	%	Type	Value	Unit
101-68-8	diphenylmethane-4,4'-diisocyanate				
	OEL (Japan)	0,05		mg/m ³	
	AGW (Germany)	0,05		mg/m ³	
		1;=2=(I);DFG, 11, 12, Sa			
	PEL (USA)		Short-term value:	C 0,2 mg/m ³ , C 0,02 ppm	
	REL (USA)		Short-term value:	C 0,2* mg/m ³ , C 0,02* ppm	
			Long-term value:	0,05 mg/m ³ , 0,005 ppm	
				*10-min	
	TLV (USA)	0,051		mg/m ³ , 0,005 ppm	

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

OEL (Japan) 0,05 mg/m³AGW (Germany) 0,05 mg/m³

1;=2=(I);DFG, 11, 12, Sa

PEL (USA) Short-term value: C 0,2 mg/m³, C 0,02 ppmREL (USA) Short-term value: C 0,2* mg/m³, C 0,02* ppmLong-term value: 0,05 mg/m³, 0,005 ppm

*10-min

TLV (USA) 0,051 mg/m³, 0,005 ppm

- **Additional information:** WEL: workplace exposure limit

· **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Do not inhale gases / fumes / aerosols.

Keep away from foodstuffs, beverages and feed.

Store protective clothing separately.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

· **Respiratory protection:**

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

At spray application respiratory protection must be worn.

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Filter A/P2 (EN 14387)

- **Protection of hands:** Heat resistant gloves
 - **Material of gloves:** Leather gloves
- **Eye protection:** Goggles recommended during refilling
- **Body protection:** Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

- **Form:** Solid
- **Colour:** White
- **Odour:** Light

· Change in condition

- **Boiling point/Boiling range:** Undetermined.
- **Fusion temperature / range:** 70°C (ring + ball)

· **Flash point:** Not applicable.

· **Ignition temperature:** > 300°C

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C:** 1,1 g/cm³

· Solubility in / Miscibility with

· **water:** Insoluble.

· **Other information** No further relevant information available.

10 Stability and reactivity

· Reactivity

· Chemical stability

· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.

· **Possibility of hazardous reactions:** No dangerous reactions known.

· **Conditions to avoid:** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

· **Hazardous decomposition products:** Isocyanates

· Additional information:

When hotmelt adhesives are melted and applied, vapours are set free and an unpleasant odour can occur, even if the recommended working temperature has been observed. Moreover if the prescribed working temperature is exceeded over a longer period, harmful decomposition products can develop. Precautions should be taken to eliminate the vapours, e.g. by using a suitable ventilation system.

Therefore measures for the elimination of the vapours have to be taken, e.g. by means of an appropriate ventilation/ exhaust device.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· **LD/LC₅₀ values relevant for classification:**

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

Oral LD50 15000 mg/kg (rat)

· Primary irritant effect:

- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

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- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
67/584 EC, 1272/2008 EC (28.-31.ATP, 1.ATP): Cancerogen Cat. 3; R 40

12 Ecological information

- **Toxicity**
 - **Acquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
 - **Other information:** The product is difficultly biodegradable.
- **Behaviour in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
 - **General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation**
Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
Can be disposed of with household garbage in small quantities after curing.
 - **European waste catalogue**
08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances
- **Uncleaned packaging:**
 - **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

14 Transport information

- **Transport hazard class(es)**
 - **ADR**
 - **Class** No dangerous good
 - **Label** -
- **IMDG, IATA**
 - **Class** No dangerous good
- **Environmental hazards:**
 - **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
See position 2 - Hazards Identification
- **National regulations:**
 - **(D) Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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- **Other regulations, limitations and prohibitive regulations Restricted to professional users.**
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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**

- 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.
- R20 Harmful by inhalation.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R40 Limited evidence of a carcinogenic effect.
- R42/43 May cause sensitisation by inhalation and skin contact.
- R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

- **Department issuing MSDS:** Safety & Environment

- **Contact:** Dr. Wolfgang Stüber

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent

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

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