

## Safety Data Sheet

### 1: IDENTIFICATION

-Trade Name / Article No: 706.1 GLU0009P

-Identified uses of the substance: Adhesive

### 2: Hazard(s) Identification

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

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

Carc. 2 – Suspected of causing cancer

Skin Ses. 1 – May cause an allergic skin reaction

### -Label Elements

Hazard Pictograms:



GHS08

**Signal Word:** Danger

### Hazard-determining components of labeling:

Diphenylmethane-4,4'-diisocyanate

### Hazard Statements:

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

-May cause an allergic skin reaction.

-Suspected of causing cancer.

### Precautionary Statements:

-Wear protective gloves

-Avoid breathing vapors

-Get medical advice / attention if you feel unwell.

### Additional Information:

-Contains isocyanates. May produce an allergic reaction.

### Hazardous Material (US)

This material is considered as hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

CAUTION! HARMFUL!

### Classification System:

NFPA ratings (scale 0-4) – USA



Health = 2

Fire = 1

Reactivity = 0

HMIS ratings (scale 0-4) – USA

HEALTH = 2

FIRE = 1

REACTIVITY = 0

HMIS PPE – Personal Protection Equipment (A-K, X)-USA – B: Safety Glasses, Gloves

## **CARCINOGENICITY**

Diphenylmethane diisocyanate

NTP: No IARC: 3 OSHA: No

**Results of PBT and PvB assessment:** N/A

### **3. Composition / Information on ingredients**

**Mixes** -Description: Mixture of synthetic plastics, based on polyurethane

#### **Dangerous Components:**

<b>CAS NO.</b>	<b>DESCRIPTION</b>
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CAS 101-68-8	diphenylmethane-4,4'-diisocyanate
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RTECS: NQ 9350000 Xn R20-40-48/20; Xi R36-37/38-42/43

Carc Cat. 3

Resp. Sens. 1

Carc. 2

Stot Re 2

Acute Tox. 4

Skin Irrit. 2

Eye Irrit. 2

Skin Sens. 1

Stot SE 3

### **4. First-aid measures**

**After inhalation:** Supply fresh air and be sure to 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.

**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. Fire-fighting measures**

**Suitable extinguishing agents:** CO2 extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

- Nitrogen oxides (NOx)

- Isocyanates

- Traces of Hydrogen cyanide (HCN)

**Advice for firefighters**

- Wear self-contained respiratory protective device.

### **6. Accidental release measures**

**PPE**-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 clean up** –



- Ensure adequate ventilation
- Allow to solidify
- Pick up mechanically

## 7. Handling & Storage

**Handling**-Ensure good ventilation/exhaustion and the workplace. Prevent formation of dust.

**Conditions for safe storage:** -Keep container tightly closed. Protect from humidity and water.

## 8. Exposure controls/ PPE

**Control parameters – Components with limit values that require monitoring at the workplace:**

CAS No.	Designation of material	Type	Value Unit
101-68-8	diphenylmethane-4,4'-diisocyanate	PEL(USA) short term:	C0.2mg/m <sup>3</sup> , C 0.02 ppm
101-68-8	diphenylmethane-4,4'-diisocyanate	REL(USA) short term:	C0.2* mg/m <sup>3</sup> C 0.02*ppm
101-68-8	diphenylmethane-4,4'-diisocyanate	REL(USA) long term:	C0.5mg/m <sup>3</sup> , C 0.0052 ppm
	*10-min		
101-68-8	diphenylmethane-4,4'-diisocyanate	TLV(USA)	0.051 mg/m <sup>3</sup> , 0.005 ppm
101-68-8	diphenylmethane-4,4'-diisocyanate	EL(Canada)Short term:	C 0.01 ppm
101-68-8	diphenylmethane-4,4'-diisocyanate	EL(Canada)Long term:	C 0.005 ppm
			Skin; S
101-68-8	diphenylmethane-4,4'-diisocyanate	EV(Canada)Long term:	0.005 ppm
101-68-8	diphenylmethane-4,4'-diisocyanate	TWA(Canada)Short term	0.02 ppm
			0.2 (10 minutes) mg/m <sup>3</sup>
101-68-8	diphenylmethane-4,4'-diisocyanate	TWA(Canada) Long term	0.005 mg/m <sup>3</sup>
			0.05 (10 minutes) mg/m <sup>3</sup>
101-68-8	diphenylmethane-4,4'-diisocyanate	IDLH Documentation 8/16/96	

### Engineering Controls

When hotmelt adhesives are melted and applied, vapors are set free and an unpleasant odor 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. Measures for the elimination of the vapors have to be taken, e.g. by means of an appropriate ventilation/exhaust device.

### PPE-Breathing Equipment

At spray application, respiratory protection must be worn. Filters OV/N95

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.

**PPE-Protection of hands**-Heat resistant gloves – Leather

**PPE-Eye protection** –Goggles recommended during refilling

## 9. Physical and Chemical Properties

- Form: Solid
- Color: According to product specification
- Odor: Light
- pH Value: N/A
- Boiling Point/Boiling Range: Undetermined
- Softening temperature/range: ca. 70°C (ca. 158°F)(ring + ball)
- Flash Point: N/A
- Ignition Temperature: >300°C (>572°F)

- Auto Ignition: Product is not self-igniting
- Danger of Explosion: Product does not present an explosion hazard
- Density at 20°C (68°F): ca. 1.1g/cm<sup>3</sup> (ca. 9.18 lbs/gal)
- Solubility in / Miscibility with Water: Insoluble

#### 10. Stability and reactivity

**Chemical stability:** Stable when stored and used properly

**Thermal decomposition / conditions to avoid:** 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:** Isocyanate

#### 11. Toxicological Information

**Acute Toxicity – LD/LC50 values that are relevant for classification:**

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

Oral LD50 >2000 mg/kg (rat) (84/449/EWG, B.1)

Dermal LD50 >9400 mg/kg (rabbit) (OECD 402)

Inhalative LC50/4h 0.368 mg/l (rat)(OECD 403)

**Primary Irritant Effect:**

**On the skin:** : No irritating effect

**On the eye:** No irritating effect

**Sensitization:** possible through inhalation and skin contact

THE PRODUCT SHOWS THE FOLLOWING DANGERS ACCORDING TO INTERNALLY APPROVED CALCULATION METHODS FOR PREPARATIONS: HARMFUL

**Carcinogenic categories:**

-IARC – DIPHENYLMETHANE-4,4'-DIISOCYANATE: Group 3

-NTP-None of the ingredients is listed

-CMR effects (carcinogenetic, mutagenicity and toxicity for reproduction)

67/584 EC, 1272/2008 EC (28.-31.ATP, 1.ATP): Cancerogen Cat.3 /R 40 (DSD,DPD): Cat 2/ H 351 (GHS, CLP) Carc. 2

#### 12. Ecological Information

**Aquatic Toxicity:** No further relevant information available

**Persistence and degradability:** The product is difficultly biodegradable

**Bioaccumulative potential:** No further relevant information available

**Mobility in soil:** No further relevant information available

**Results of PBT and vPvB assessment:** Not applicable

#### 13. Disposal considerations

**Recommendation:** Hand over to hazardous waste disposers. When adhesive has reacted completely, can be disposed of with household garbage in small quantities after curing.

**Unclean packagings:** Empty contaminated packaging thoroughly. Disposal must be made according to official regulations. Non-contaminated packaging can be used for recycling.



#### 14. Transport Information

##### **DOT, IMDG**

Class: No dangerous good

##### **IATA**

Class: Not classified as dangerous goods under IATA regulations

**Marine Pollutant:** No

**Transport in bulk according to annex II of MARPOL 73/78 and the IBC Code:** Not applicable

#### 15. Regulatory Information

**Sara – USA:** Section 313 – 101-68-8 diphenylmethane-4,4'-diisocyanate

**TSCA – USA:** 101-68-8 diphenylmethane-4,4'-diisocyanate

##### **Proposition 65 – USA**

-Chemicals known to cause cancer: None listed

-Chemicals known to cause developmental toxicity: None listed

-Chemicals known to cause reproductive toxicity for females: None listed

**EPA:** 101-68-8 diphenylmethane-4,4'-diisocyanate

**TLV (Threshold Limit Value established by ACGIH) – USA:** 101-68-8 diphenylmethane-4,4'-diisocyanate

**NIOSH-Ca:** None listed

**VOC – US(40CFR part59):** VOC Content (g/l) solid, 0 g / L

**15.2. 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.

##### **USA: Relevant labels and warnings**

-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

-Harmful by inhalation

-Irritating to eyes, respiratory system and skin

-Limited evidence of a carcinogenic effect

-May cause sensitization by inhalation and skin contact

-Harmful: danger of serious damage to health by prolonged exposure through inhalation.

