



Safety Data Sheet acc. to OSHA HCS

Printing date 02/27/2015

Version-No. 5

Reviewed on 11/12/2014

1: Identification

- **1.1. Product identifier**
- **Trade name / Article No:** CP-0701
- **1.2. Relevant identified uses of the substance / mixture or uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Adhesives
- **1.3. Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Spectrum Adhesives, Inc.
5611 Universal Dr.
Memphis, Tn 38118
- **Information department:** Phone: 901-795-1943 Fax: 901-360-9580
- **1.4. Emergency telephone number:** INFOTRAC 1-352-323-3500 (International)
1-800-535-5350 (North America)

2: Hazard(s) identification

- **2.1. 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.
 - STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
 - Acute Tox. 4 H332 Harmful if inhaled.
 - Skin Irrit. 2 H315 Causes skin irritation.
 - Eye Irrit. 2 H319 Causes serious eye irritation.
 - Skin Sens. 1 H317 May cause an allergic skin reaction.
 - STOT SE 3 H335 May cause respiratory irritation.

- **2.2. Label elements**
- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
methylenediphenyl diisocyanate
- **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.

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H335 May cause respiratory irritation.

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

- **Precautionary statements**

P280 Wear protective gloves / eye protection.

P260 Do not breathe vapours.

P302+P352 If on skin: Wash with plenty of water.

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:**

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 = 1

Fire = 1

Reactivity = 0

- **HMIS-ratings (scale 0 - 4) - USA:**

Health = 1

Fire = 1

Reactivity = 0

- **CARCINOGENICITY**

diphenylmethane diisocyanate

NTP: No IARC: 3 OSHA: No

- **2.3. Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3: Composition/information on ingredients

- **3.2. Mixtures**

- **Dangerous components:**

CAS NO.	Description	%
	prepolymer, based on diphenylmethane-diisocyanate Xn R20-40-48/20; Xi R36/37/38-42/43 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	40-60%
CAS: 26447-40-5	methylenediphenyl diisocyanate Xn R20-40-48/20; Xi R36/37/38-42/43 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	30-40%
CAS: 101-68-8 RTECS: NQ 9350000	diphenylmethane-4,4'-diisocyanate Xn R20-40-48/20; Xi R36/37/38-42/43 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	10-20%

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4: First-aid measures

4.1. Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

• **After inhalation:** Supply fresh air and to be sure call for a doctor.

After skin contact:

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

If skin irritation continues, consult a doctor.

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

After swallowing:

Rinse out mouth with plenty of water.

Do not induce vomiting; immediately call for medical help.

Information for doctor:

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.

5: Fire-fighting measures

5.1. Extinguishing media

• **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

• **For safety reasons unsuitable extinguishing agents:** Water with full jet

5.2. Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Nitrogen oxides

Isocyanates

Traces:

Hydrogen cyanide (HCN)

5.3. Advice for firefighters

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

6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

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

See Pos. 8 - Breathing equipment.

6.2. Environmental precautions:

Do not allow to enter surface or ground water.

Prevent seepage into sewage system, workpits and cellars.

6.3. Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Take up mechanically; cover residues with wet, liquid-binding material (saw dust, universal binder - diatomite, sand). Take up after 1 hour in receptacles, don't close tight (development of CO₂ !). Be aware that sufficient moisture is present and keep outdoors for several days.

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.

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7: Handling and storage

- **Handling:**
- **7.1. Precautions for safe handling**
Caution: Do not refill residue into storage receptacles
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **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:** Keep container tightly closed.
- **Information about storage in one common storage facility:** Observe the national regulations.
- **Further information about storage conditions:** Protect from humidity and water.
- **7.3. Specific end use(s)** No further relevant information available.

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:**

CAS No.	Designation of material	%	Type	Value	Unit
101-68-8	diphenylmethane-4,4'-diisocyanate				
	PEL (USA)			Ceiling limit value: 0.2 mg/m ³ , 0.02 ppm	
	REL (USA)			Long-term value: 0.05 mg/m ³ , 0.005 ppm Ceiling limit value: 0.2* mg/m ³ , 0.02* ppm *10-min	
	TLV (USA)			Long-term value: 0.051 mg/m ³ , 0.005 ppm	
	EL (Canada)			Long-term value: 0.005 ppm Ceiling limit value: 0.01 ppm Skin; S	
	EV (Canada)			Long-term value: 0.005 ppm Ceiling limit value: 0.02 ppm	
	TWA (Canada)			Short-term value: 0.2 (10 minutes) mg/m ³ , 0.02 ppm Long-term value: 0.05 mg/m ³ , 0.005 ppm IDLH Documentation 8/16/96	

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

PEL (USA) Ceiling limit value: 0.2 mg/m³, 0.02 ppm

REL (USA) Long-term value: 0.05 mg/m³, 0.005 ppm
Ceiling limit value: 0.2* mg/m³, 0.02* ppm
*10-min

TLV (USA) Long-term value: 0.051 mg/m³, 0.005 ppm

EL (Canada) Long-term value: 0.005 ppm
Ceiling limit value: 0.01 ppm
Skin; S

EV (Canada) Long-term value: 0.005 ppm
Ceiling limit value: 0.02 ppm

TWA (Canada) Short-term value: 0.2 (10 minutes) mg/m³, 0.02 ppm
Long-term value: 0.05 mg/m³, 0.005 ppm
IDLH Documentation 8/16/96

8.2. Exposure controls

Personal protective equipment:

- **Breathing equipment:** Use suitable respiratory protective device only when aerosol or mist is formed.

- **Protection of hands:** Protective gloves

Material of gloves

A Nitrile rubber - NBR: AlphaTec® (Lamination strength not applicable)

D butyl rubber - BR: ChemTek™ (0,7 mm)

E Fluorocarbon rubber (Viton) - FKM (0,7 mm) ! General information without declaration of a manufacturer !

F Natural rubber - NR: Extra™ (0.5 mm)

G Chloroprene rubber - CR: Neotop® (0,75 mm)

H Polyvinylchloride - PVC: Snorkel® (0,5 mm)

- **Penetration time of glove material** Value for the permeation: Level <= 8 h

- **Eye protection:** Tightly sealed goggles

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9: Physical and chemical properties

· 9.1. Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Color:	Brown
Odor:	Weak, characteristic
Odour threshold:	Not determined
pH-value:	Not applicable

· Change in condition

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	208 °C (406 °F)
Softening temperature / range:	Not determined

· Flash Point: 212 °C (414 °F)

· Flammability (solid, gaseous): Product is not flammable.

· Ignition Temperature: 520 °C (968 °F)

· Decomposition Temperature: ~260 °C (~500 °F) (CAS 101-68-8)

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

· Explosion Limits:

Lower:	Not determined
Upper:	Not determined

· Vapor Pressure at 20 °C (68 °F): < 0.0001 hPa (< 0 mm Hg) (CAS: 101-68-8)

· Density at 20 °C (68 °F): ca. 1.13 g/cm³ (ca. 9.43 lbs/gal)

· Vapour Density: Not determined

· Evaporation Rate: Not applicable

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined

· Viscosity:

Dynamic at 20 °C (68 °F): ca. 8000 mPas
Method: Brookfield RVT

· 9.2. Other information: No further relevant information available.

10: Stability and reactivity

· 10.1. Reactivity see item 10.3

· 10.2. Chemical stability Stable when stored and used properly.

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

· 10.3. Possibility of hazardous reactions

Exothermic reactions with amines, alcohols, acids and bases. Reacts with water forming CO₂-gas. In closed containers risk of bursting owing to increase 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: No dangerous decomposition products known.

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11: Toxicological information

- **11.1. Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

26447-40-5 methylenediphenyl diisocyanate

Oral LD₅₀ >10000 mg/kg (rat)

Dermal LD₅₀ >9400 mg/kg (rabbit)

Inhalative LC₅₀/4h_(Staeube,Nebel) 0.49 mg/l (rat)

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

Oral LD₅₀ 2001 mg/kg (rat) (84/449/EWG, B.1)

Dermal LD₅₀ 9401 mg/kg (rabbit) (OECD 402)

Inhalative LC₅₀/4h_(Staeube,Nebel) 0.368 mg/l (rat) (OECD 403)

- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:** Irritating effect.

- **Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

diphenylmethane-4,4'-diisocyanate: 3

cyclohexanone: 3

Benzoylchlorid: 2A

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **CMR effects (carcinogenicity, 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

- **12.1. Toxicity**

- **Aquatic toxicity:**

26447-40-5 methylenediphenyl diisocyanate

EC₅₀ >1000 mg / l / 24h (water flea - Daphnia)

LC₅₀ >1000 mg / l / 96h (fish)

- **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:** Must not reach bodies of water or drainage ditch undiluted or unneutralized.

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

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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- **12.6. Other adverse effects** No further relevant information available.

13: Disposal considerations

- **13.1. Waste treatment methods**
- **Recommendation:**
Must be specially treated adhering to official regulations.
Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
Hand over to hazardous waste disposers.
- **Uncleaned packagings:**
- **Recommendation:**
Empty contaminated packagings thoroughly. Disposal must be made according to official regulations.
Non contaminated packagings can be used for recycling.

14: Transport information

- **14.1. UN-Number**
- **IMDG, IATA** Void
- **14.2. UN proper shipping name**
- **DOT, IMDG, IATA** Void
- **DOT, IMDG**
- **Class** Void
No dangerous good
- **IATA**
- **Class** Void
Not classified as dangerous goods under IATA regulations
- **14.4. Packing group**
- **DOT, 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 MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

15: Regulatory information

- **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
See position 2 - Hazards Identification
- **Sara - USA:**
- **Section 313 (Specific toxic chemical listings):**
101-68-8 diphenylmethane-4,4'-diisocyanate
- **TSCA (Toxic Substances Control Act) - USA:**
- **Proposition 65 - USA**
- **Chemicals known to cause cancer:**
None of the ingredients is listed.
- **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.
- **Chemicals known to cause developmental toxicity (Prop 65):**
None of the ingredients is listed.
- **EPA (Environmental Protection Agency):**
101-68-8 diphenylmethane-4,4'-diisocyanate: D, CBD

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- **NIOSH-Ca (National Institute for Occupational Safety and Health) - California/USA:**

None of the ingredients is listed.

- **National regulations:**

- **Other regulations, limitations and prohibitive regulations Restricted to professional users.**

- **VOC - Volatile Organic Compounds**

- **US (40CFR part59): VOC content [g / L] 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**

HAZCOM LABEL: CAUTION! HARMFUL.

MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT.

- **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 sensitization by inhalation and skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

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

- **Contact:** Dr. Wolfgang Stüber

- **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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Carc. 2: Carcinogenicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

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