A logo with a spider

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**MATERIAL SAFETY DATA SHEET**

**SPYDER GLUE™ ECO**

Date 5/23/2023 Page: 1/7

**1. Substance/preparation and company identification**

**Company COMPANY HOURS MONDAY – FRIDAY 8 AM – 4 PM EST**

SPYDER GLUE™, INC GENERAL INFORMATION

7213 Talamore Dr

Wesley Chapel, Fl 33545 *SPYDER GLUE: 314-283-1139*

513-535-7178

Chemical Family: aromatic isocyanates

Synonyms: MDI ISOCYANATE PREPOLYMER

**2. Composition/Information on ingredients**

**CAS Number Content (W/W) Chemical Name**

100916-02-7 90 - 99 % URETHANE PREPOLYMER

101-68-8 00 - 10% 4,4’ METHYLENEDIPHENYL DIISOCYANATE

9016-87-9 00 – 10% DIPHENYLMETHANE DIISOCYANATES, ISOMERS AND HOMOLOGUES

**3. Hazard Identification**

**Hazard Classification**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity – Category 4 – inhalation

Skin irritation – Category 2

Eye irritation – Category 2B

Respiratory sensitization – Category 1

Skin sensitization – Category 1

Specific target organ toxicity – single exposure – Category 3

Specific target organ toxicity – repeated exposure – Category 2 - Inhalation

**Label Elements**

**Hazard Pictograms**



**Emergency Overview**

CAUTION: INHALATION OF MDI MISTS OR VAPORS MAY CAUSE RESPIRATORY IRRITATION, BREATHLESSNESS, CHEST DISCOMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM EXPOSURE TO ISOCYANATES HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY CAUSE SENSITIZATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPIRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING.

**Potential health effects**

**Primary routes of exposure**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

**Acute toxicity:**

*Information on: MDI*

*Inhalation of MDI vapors may cause irritation of the mucous membranes of the nose, throat or trachea, breathlessness, chest discomfort, difficult breathing and reduced pulmonary function. Air-borne overexposure well above the PEL may result additionally in eye irritation, headache, chemical bronchitis, asthma-like findings or pulmonary edema. Isocyanates have also been reported to cause hypersensitivity pneumonoitis, which is characterized by flu-like symptoms, the onset of which may be delayed. Gastrointestinal symptoms include nausea, vomiting and abdominal pain.*

**Irritation:**

*Information on: Diisocyanates*

*Eye contact with isocyanates may result in conjunctival irritation an dmild corneal opacity. Skin contact may result in dermatitis, either irritative or allergic.***Repeated dose toxicity:**

*Information on: MDI*

*Results from a lifetime inhalation study in rats indicate that MDI aerosol was carcinogenic at 6 mg/m3, the highest does tested. This is well above the recommended TLV of 56 ppb (0.05 mg/m3). Only irritation was noted at the lower concentration of 0.2 and 1 mg/m3. No birth defects or teratogenic effects were reported in a teratology study with rats exposed to 1. 4, and 12 mg/m3 polymeric MDI for 6 hr/day on days 6-15 of gestation. Embryotoxicity and fetotoxicity was reported at the top dose in the presence of maternal toxicity.*

*Information on: Isocyanates*

*As a result of previous repeated overexposures or a singl large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to later exposure to isocyanate at levels well below the PEL/TLV. These symptoms, which include chest tightness, wheezing, cough, shortness of breath, or asthmatic attack, could be immediate or delayed up to several hours after exposure. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air, or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including a decrease in lung function, which may be permanent. Sensitization may be either temporary or permanent. Prolonged contact can cause reddening, swelling, rash, scaling, or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material, or even as a result of vapor-only exposure.*

**Medical conditions aggravated by overexposure:**

The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing.

Medical supervision of all employees who handle or come into contact with isocyanates is recommended. Contact may aggravate pulmonary disorders.

Persons with history of respiratory disease or hypersensitivity should not be exposed to this product. Preemployment and periodic medical examinations with respiratory function tests (FEV, FVC as a minimum) are suggested.

An animal study indicated that MDI may induce respiratory hypersensitivity following dermal exposure. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.

**4. First-aid measures**

**General advice:**

Remove contaminated clothing.

**If inhaled:**

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

**If on skin:**

Remove material from skin by washing affected areas thoroughly with soap and water. Polyglycol based skin cleaner if available. If irritation or rash develops, seek medical attention.

**If in eyes:**

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Suitable emergency eye wash facility should be immediately available. Immediate medical attention required, preferably from an opthamologist.

**If swallowed:**

Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

**Note to physician**

Antidote: Specific antidotes or neutralizers to isocyanates do not exist.

**Treatment:** Treatment should be supportive and based on the judgment of the physician in

response to the reaction of the patient.

**5. Fire-fighting measures**

**Flash point:** >200 °C (open cup)

**Autoignition:** No data available.

**Suitable extinguishing media:**

Water spray, dry extinguishing media, carbon dioxide, foam

Direct water stream may spread the fire. Water fog or spray are recommended to cool the fire.

**Hazards during fire-fighting:**

Nitrous gases, fumes/smoke, Isocyanate vapors, Nitrogen Oxides, Hydrogen Cyanaide

**Protective equipment for fire-fighting:**

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**6. Accidental release measures**

**Personal precautions:**

Isolate area and keep unnecessary and unprotected personnel from entering the area. Spilled material may cause slipping hazard. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

**Environmental precautions:**

Do not discharge into drains/surface waters/groundwater.

**Cleanup:**

Dike spillage.

For small amounts: Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not seal container. Move container to a well-ventilated area (outside). Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90% water, 8% concentrated ammonia, 2% detergent. Add at a 10 to 1 ratio. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide. For large amounts: if temporary control of isocyanate vapor is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

For residues: The following measures should be taken for final cleanup: Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes.

**7. Handling and storage**

**Handling**

**General advice:**

If bulging of container occurs, transfer to well ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

Avoid contact with the skin and eye. Do not smoke, eat or drink at the work place where Spyder Glue™ is in use.

If Vapor or mist is generated during use of Spyder Glue™ local exhaust ventilation should be provided to minimize exposure.

**Protection against fire and explosion:**

No explosion proofing necessary.

**Storage**

**General advice:** Store in a dry place. Do not store product contaminated with water to prevent potential hazardous reaction. Keep container tightly closed and in a well-ventilated place. Empty space in containers should be filled with dry inert gas at atmospheric pressure to avoid reaction with moisture.

**Storage stability:**

Storage temperature: 65 - 95 °F

Protect against moisture.

**8. Exposure controls and personal protection**

**Components with workplace control parameters**

Diphenylmethane-4,4’- OSHA CLV 0.02 ppm 0.2 mg/m3

Diisocyanate (MDI) ACGIH TWA value 0.005 ppm

**Advice on system design:**

Provide local exhaust ventilation to maintain recommended P.E.L.

**Personal protective equipment**

**Respiratory protection:**

Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations. When atmospheric levels my exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used so long as appropriate precautions and change out schedules are in place.

**Hand protection:**

Chemical resistant protective gloves, suitable materials, chloroprene rubber (Neoprene), nitrile rubber (Buna N), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, fluoroelastomer (Viton), nitrile rubber (Buna N)

**Eye protection:**

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

**Body protection:**

Suitable materials to protect skin from contact. Selection of specific items such as boots, apron or full body suit will depend on the task.

**General safety and hygiene measures:**

Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible. Observe the appropriate PEL value. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

**9. Physical and chemical properties**

Form: liquid

Odour: faint odour, aromatic

Colour: amber to light brown

pH value: No data available

Freezing point: No data available

Boiling point: >300 °C (5 mmHg)

Flash Point > 250 °C

Vapour pressure: <0.00001 mmHg (20 °C)

Relative density: approx. 9.1 lb/gal (25 °C)

Relative density to water approx.. 1.09 (20 °C)

Viscosity, dynamic: 24000- 30000 centipoise (25°C)

Miscibility with water: Reacts with water.

Explosive Properties Not Explosive

Oxidizing Properties Not an Oxidizer

**10. Stability and reactivity**

**Conditions to avoid:**

Avoid moisture

**Chemical Stability:**

Stable under recommended storage conditions.

**Substances to avoid:**

Water, alcohols, strong bases. Substances/products that react with isocyanates.

**Hazardous reactions:**

The product is chemically stable.

Reacts with water, with formation of carbon dioxide. This reaction will raise pressure in a closed container and cause a rupturing of the container. Reactions with water, alcohols, acids, alkalis, and/or amines will produce gas and heat.

**Decomposition of products:**

High temperature will cause decomposition and the evolution of gases. Hazardous decomposition products: carbon monoxide, hydrogen cyanide, nitrogen oxides, aromatic isocyanates, gases/vapors

**Thermal decomposition:**

No data available.

**Corrosion to metals:**

No corrosive effect on metal.

**11. Toxicological information**

**Acute toxicity**

**Oral:**

LD50/rat- > 10,000 mg/kg

Practically nontoxic.

**Inhalation:**

LC50/rat > 2.240 mg/l/ 1h

Moderately toxic

At room temperature, vapors are minimal due to low volatility. However, certain operations may generate vapor or mist concentrations sufficient to cause respiratory irritation and other adverse effects.

**Skin Irritation:**

Prolonged or repeated skin contact may result in tanning or irritating effects or rashes.

**Eye Irritation:**

Exposure may cause irritating effects on the eyes.

**12. Ecological information**

**Environmental toxicity**

**Acute and prolonged toxicity to fish:**

Static

Zebra fish/LC50 (24 h): > 500 mg/l

Practically nontoxic.

**Acute toxicity to aquatic invertebrates:**

Daphnia magna/EC50 (24 h): > 500 mg/l

Practically nontoxic.

**13. Disposal considerations**

**Waste disposal of substance:**

**DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER.** All disposal practices must be in compliance with all Federal, State/ Provincial and local laws and regulations. Waste characterizations and compliance with applicable laws are the responsibility of the waste generator. As your supplier we have no control over the management practices of parties using this material.

For unused and uncontaminated Spyder Glue™, incinerate or dispose of in a licensed facility.

1. **Transport Information**

LAND TRANSPORT

USDOT Not classified as a dangerous good under transport regulations

SEA TRANSPORT Not classified as a dangerous good under transport regulations

AIR TRANSPORT Not classified as a dangerous good under transport regulations

**15. Regulatory Information**

**Federal Regulations**

**Registration status:**

TSCA, DSL & NDSL listed

**OSHA hazard category:** Highly **toxic –** inhalation,chronic target organ effects reported, ACGIH TLV established, Acute target organ effects reported, skin and/or eye irritant, OSHA PEL established, Sensitizer

**CERCLA RQ:**

5,000 LBS

**SARA hazard categories (EPCRA 311/312):** Acute, Chronic

**SARA 313:**

**CAS Number Chemical name**

101-68-8 4,4’ METHYLENEDIPHENYL DIISOCYANATE

9016-87-9 DIPHENYLMETHANE DIISOCYANATES, ISOMERS AND HOMOLOGUES

**State regulations**

**CALIFORNIA PROP 65**

No Proposition 65 Chemicals known to exist in this product.

**State RTK**

**CAS Number** **Chemical name** **State RTK**

101-68-8 Diphenyimethane-4,4’-diisocyanate (MDI) MA, NJ, PA

**16. Other Information**

**HMIS III rating**

Health: 2¤ Flammability: 1 Physical hazard: 1

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

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