

Material Safety Data Sheet

SP-301 PART A

Date of Preparation: 05/03/2005

Revision: 05/03/2005

Section 1 - Chemical Product and Company Identification

Product Name: SP-301 PART A

Product Class: Aromatic isocyanate

Chemical Type: Polymeric diphenylmethane polyphenylene ester

Manufacturer: BJB Enterprises, Inc., 14791 Franklin Avenue, Tustin, CA 92780, Phone (714) 734-8450, Fax (714) 734-8929, (M-Th: 8-4:30, F: 7:30-4), Emergency Phone: Chemtrec (800) 424-9300 or (703) 527-3887

Section 2 - Composition / Information on Ingredients

Ingredient Name	CASRN	% wt
1. 4,4 Diphenylmethane diisocyanate	101-68-8	<55
2. Oligomers of MDI	9016-87-9	<55
3. Diphenylmethane diisocyanate (2,2:2,4)	26447-40-5	<10
4. Phenyl isocyanate	103-71-9	trace

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Appearance: Dark brown liquid; Odor: Slightly musty; May cause eye and skin irritation; Burning material may generate toxic fumes.

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†Sec. 8

Potential Health Effects

Primary Entry Routes: Eye and skin contact; inhalation of vapors, accidental ingestion.

Inhalation/Ingestion: Excessive vapors caused by heat or spray mist can cause respiratory distress.

Eye: May cause irritation, reddening and swelling.

Skin: May cause irritation, reddening and skin sensitization.

Medical Conditions Aggravated by Long-Term Exposure: Acute asthma, respiratory disorders, skin allergies and excema.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air environment.

Ingestion: Do NOT induce vomiting. Provided the patient is conscious, wash out mouth with water then give 1 or 2 glasses of water or milk to drink. Consult a physician.

Eye Contact: Flush eyes with clean, lukewarm water for 15 minutes. Obtain medical attention if irritation develops.

Skin Contact: Remove contaminated clothing and wash affected areas well with soap and water. Wash contaminated clothing before use.

Note to Physician: Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. Workplace vapors have produced reversible corneal epithelial edema impairing vision. Skin: This compound is a known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burns. If burned, treat as thermal burn.

Ingestion: Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of this compound. Respiratory: This compound is a known pulmonary sensitizer. Treatment is essentially symptomatic. An individual having a skin or pulmonary sensitization reaction to this material should be removed from exposure to an Isocyanate.

Section 5 - Fire-Fighting Measures

Flash Point/Method: 390°F (199°C) PMCC

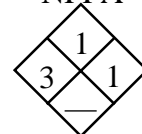
Extinguishing Media: Dry chemical, carbon dioxide, foam or water spray for large fires.

Unusual Fire or Explosion Hazards: Burning material will generate toxic fumes. High heat can cause pressure build up in closed containers. Explosive rupture is possible. Use cold water to cool fire exposed containers.

Fire-Fighting Instructions: Cool fire exposed containers with water spray. Remove containers from fire area if possible. Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) and consider use of unmanned hose holders or monitor nozzles for fighting large fires.

NFPA



Section 6 - Accidental Release Measures

Spill /Leak Procedures: Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment, including respiratory equipment during clean up. (See Section 8). If a temporary control of Isocyanate vapor is required, a blanket of protein foam (available at most fire departments) may be placed over the spill. Large quantities may be pumped into closed, but not sealed, containers for disposal.

Minor Spill: Absorb Isocyanates with sawdust or other absorbent, shovel into suitable containers, transport to well-ventilated area (outside) and treat with neutralizing solution; mixture of water (90%) with non-ionic surfactant Tergitol TMN-10 (20%), or water (90%), concentrated ammonia (3-8%) and detergent (2%). Add about 10 parts of neutralizer per part of Isocyanate, with mixing. Allow to stand uncovered for 48 hours to let CO₂ escape. Clean up: Decontaminate floor with decontamination solution letting stand for at least 15 minutes.

Containment: For large spills, dike ahead of liquid spill for later neutralization, absorption, clean up, and disposal.

Empty Container Precautions: Empty containers must be handled with care due to product residue. Decontaminate containers prior to disposal. Empty decontaminated containers should be crushed to prevent reuse. **DO NOT HEAT OR CUT EMPTY CONTAINERS WITH ELECTRIC OR GAS TORCH.** (See Sections 5 and 10) gases may be highly toxic.

Section 7 - Handling and Storage

Handling Precautions: Avoid skin contact. Avoid exposure to humid conditions or water contamination.

Storage Temperature: 64° - 86°F (18° - 30°C) recommended.

Storage Requirements: Store in a cool, dry place away from excessive heat in original or similar waterproof containers. Avoid unnecessary contact. Protect from freezing. Containers should be tightly sealed to prevent contamination with foreign materials.

Shelf life: 6 months from date of shipment under manufacturers recommended storage conditions.

Section 8 - Exposure Controls / Personal Protection

Exposure Limits:

4,4' Diphenylmethane diisocyanate (101-68-8)

OSHA PEL /TWA: 0.02 ppm

ACGIH TLV/TWA: 0.005 ppm

NIOSH REL/STEL: 0.02 ppm

Oligomers of MDI (9016-87-9)

Not established

Diphenylmethane diisocyanate (2,2:2,4) (26447-40-5)

Not established

Phenyl isocyanate (103-71-9)

Not established

Eye Protection Requirements: Safety goggles or glasses are recommended. Plastic face shield should be worn for complete face protection.

Skin Protection Requirements: Impermeable gloves should be worn. Employees should wash their hands and face before eating, drinking, or using tobacco products.

Ventilation/Respiratory Requirements: Exhaust ventilation recommended. An organic vapor cartridge or fresh air supplied respirator may be necessary for certain applications. Consider the type of application, environmental concentrations, and other materials being used concurrently when determining respirator use and selection. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Additional Protective Measures: Safety showers and eye wash stations should be easily accessible to the work area. Working training is important. Follow all label precautions.

Section 9 - Physical and Chemical Properties

Flash Point/Method: 390°F (199°C) PMCC

Physical State: Liquid

Appearance and Odor: Dark Brown/Musty

Vapor Pressure: <10 @ 5 mm Hg @ 77°F (25°C) for MDI

Vapor Density (Air=1): 8.5

Specific Gravity (H₂O=1): 1.24

pH: N/A

Water Solubility: Not Soluble. Reacts slowly with water to liberate CO₂ gas.

Boiling Point: Decomposes @ 640°F (338°C);
406°F (208°C) @ 5mm Hg

Viscosity: 250 cps

% Volatile: None

V.O.C. (ref EPA meth 24): None

Section 10 - Stability and Reactivity

Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Hazardous Polymerization: May occur upon exposure to high temperatures above 400°F (204°C), contact with moisture or other materials which react with Isocyanates.

Chemical Incompatibilities/Conditions to Avoid: Water, strong bases, alcohols and amines.

Hazardous Decomposition: Thermal oxidative decomposition can produce carbon monoxides, oxides of nitrogen and traces of HCN, MDI vapors or aerosols.

Section 11- Toxicological Information

No Toxicological Information Available

Section 12 - Ecological Information

No Ecological Information Available

Section 13 - Disposal Considerations

Waste Disposal Method: Collect liquid or solidify for disposal in compliance with federal, state, or local environmental control regulations.

Section 14 - Transport Information

DOT
Not regulated

IATA/IACO
Not regulated

IMO/IMDG
Not regulated

Section 15 - Regulatory Information

U.S. Federal Regulations:

OSHA:

This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard.

SARA TITLE III:

Sections 311/312 Hazard Classification:

Immediate/Delayed Health Hazard; Reactive Hazard

Section 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

4,4 Diphenylmethane diisocyanate CAS# 101-68-8 <55%

TSCA: This product or its components are listed in or exempt from the TSCA inventory requirements.

This product contains the following substances subject to export notification under Section 12 (b) of TSCA:

None

Section 16 - Other Information

Reason for Issue: 3-year review

Prepared By: M. Rose

Approval Date: 05/03/2005

Supersedes Date: 04/22/2002

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