

Material Safety Data Sheet

TC-891 PART A

Date of Preparation: 10/05/2005

Revision: 10/05/2005

Section 1 - Chemical Product and Company Identification

Product Name: TC-891 PART A

Product Class: Polyurethane resin

Chemical Type: Aromatic diisocyanate, plasticizer mixture

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	50-60
2. Modified MDI	Proprietary	20-30
3. 1,2 Benzenedicarboxylic acid mixture	Proprietary	10-15

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Appearance: Translucent yellow liquid; Odor: slightly musty; Avoid skin contact. Avoid breathing vapors. May cause eye and skin irritation; Harmful if inhaled; Use in well ventilated areas; Burning material will generate toxic fumes/gases.

HMIS

H 2

F 1

R 1

PPE†

†Sec. 8

Potential Health Effects

Primary Entry Routes: Eye and skin contact; inhalation of vapors/considered low toxicity to ingestion.

Inhalation/Ingestion: Not likely. Excessive vapors caused by heat or spray mist can cause respiratory irritation/Respiratory sensitization is possible in some individuals.

Eye: May cause irritation, redness and/or tearing.

Skin: May cause irritation and possible allergic sensitivity, redness, or rash with repeated or long-term contact.

Carcinogenicity: The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.

Medical Conditions Aggravated by Long-Term Exposure: Pre-existing skin or respiratory disorders.

Section 4 - First Aid Measures

Inhalation: Not likely. Remove to fresh air environment.

Ingestion: If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

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. Launder contaminated clothing before use.

Note to Physicians: Treat any ill effects symptomatically.

Section 5 - Fire-Fighting Measures

Flash Point/Method: 405°F (207°C) PMCC

Extinguishing Media: Foam, carbon dioxide or water spray. (Dry chemical for class B fires).

Unusual Fire or Explosion Hazards: Burning material will generate toxic fumes/gases containing Hydrochloric Acid, CO₂ and HCN. Closed containers, when exposed to high heat, may generate pressure and cause explosive rupture. Cool containers with water spray.

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.



Section 6 - Accidental Release Measures

Spill /Leak Procedures: Provide adequate ventilation and wear personal protective equipment. Evacuate personnel as a precaution. Prevent product spill from entering sewers, streams or drinking water supplies. Collect liquid or soak up with inert filler or an absorbent, such as dry earth, sand or oil absorbent (sweeping) compound. Collect material into suitable containers for disposal. Wash area with dilute ammonia solution.

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

Section 7 - Handling and Storage

Handling Precautions: Avoid contact with eyes, skin and clothing. Avoid breathing vapor over open container. Avoid open container exposure to damp air.

Handling/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):
 ACGIH TLV: 0.05 mg/m³ (8 h, 40 h/week)
 OSHA PEL Ceiling Limit: 0.2 mg/m³
 NIOSH REL/TWA: 0.05 mg/m³ (10 h, 40 h/week)
 NIOSH REL/CEILING: 0.2 mg/m³ (10 minutes)

Modified MDI (Proprietary):

Not established

1,2 Benzenedicarboxylic acid mixture (Proprietary):

Not establishes

Eye Protection Requirements: Safety goggles or glasses are mandatory. Plastic face shields may be worn for complete face protection.

Skin Protection Requirements: Impermeable gloves. 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. Work training is important. Follow all label precautions.

Section 9 - Physical and Chemical Properties

Flash Point/Method: 405°F (207°C) PMCC

Physical State: Liquid

Appearance and Odor: Translucent yellow/slightly musty

Vapor Pressure: <0.01 mm Hg @ 77°F (25°C)

Vapor Density (Air=1): NE

Specific Gravity (H₂O=1): 1.18

pH: N/A

Water Solubility: Reacts slowly with water

Boiling Point: >572°F (300°C) decomposes

Viscosity: 325 cps

% Volatile: 0.75

V.O.C. (ref EPA meth 24): 9 g/l

Section 10 - Stability and Reactivity

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

Polymerization: May occur.

Chemical Incompatibilities/Conditions to Avoid: Water, acids, strong bases, alcohols, amines and oxidizers/excessive heating. Exposure to damp air will cause some product deterioration.

Hazardous Decomposition: Thermal oxidative decomposition can produce Hydrochloric Acid, CO and HCN.

Section 11- Toxicological Information

Animal Toxicity:

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

LD50 Oral (rat): >5,000 mg/kg

LD50 Dermal (rabbit): >5,000 mg/kg

Modified MDI (Proprietary):

Not established

1,2 Benzenedicarboxylic acid mixture (Proprietary):

Not established

Section 12 - Ecological Information

Ecotoxicity:

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

LC50 (Zebra fish): >1,000 mg/l

EC50 (Daphnia magna): .1,000 mg/l (24 h)

EC50 (E. Coli): >100 mg/l

Modified MDI (Proprietary):

Not established

1,2 Benzenedicarboxylic acid mixture (Proprietary):

Not established

Section 13 - Disposal Considerations

Waste Disposal Method: Dispose of in accordance with federal, state or local environmental control regulations.

Section 14 - Transport Information

DOT
Not Regulated

IATA/ICAO
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 Health Hazard; Delayed Health Hazard; Reactive Hazard.

Section 313: This product contains the following substances subject to the reporting requirements of EPCRA, Section 313 and 40 CFR Part 372:

4,4'-Diphenylmethane diisocyanate

CAS# 101-68-8

50-60%

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: New Issue
Prepared By: M. Rose
Approval Date: 10/05/2005
Supersedes Date: N/A

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