



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: SAATlchem CATALYST FOR ULTRAFIX SB3 PLUS HV

General Use: Hardens urethane-based frame adhesive

Manufacturer: SAATlchem
 2050 Hammond Dr. Schaumburg, IL. 60173
 Tel: 1-877-296-7697 or 1-847-296-7697 (Monday-Friday 8:00am – 4:30pm CST)
 Fax: 1-847-296-7408
 www.saatiamericas.com

Emergency Telephone Number: INFOTRAC 800-535-5053 or 352-323-3500, 24-hours everyday

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight Percentage	CAS Number	OSHA PEL	ACGIH TLV
4,4'-diphenylmethane Diisocyanate	>45	101-68-8	0.020 PPM STEL	0.005 PPM
Diphenylmethane Diisocyanate	1-10	26447-40-5	Not applicable	Not applicable
Polymethylenepolyphenyl Isocyanate	45-55	9016-87-9	Not applicable	Not applicable

This material is classified as hazardous under OSHA regulations.

3. HAZARDS IDENTIFICATION

Emergency Overview

Brown liquid with musty odor. **WARNING**—CAUSES EYE, SKIN, AND RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION. HARMFUL IF INHALED. Contains material that can cause damage to lungs. Toxic gases/ fumes are given off during burning or thermal decomposition.

Potential Health Effects

Routes of Entry: Skin contact from liquid and aerosols. Inhalation although MDI is low volatility an inhalation hazard can exist from MDI aerosols or vapors formed during heating, foaming, spraying or otherwise aerosolizing the material in an inadequately ventilated environment.

Eye: Causes irritation. Prolonged contact may cause sensitization to isocyanates.

Skin: Causes irritation.

Ingestion: May cause irritation.

Inhalation: Vapor causes respiratory tract irritation, pulmonary secretions, chest pain, dyspnea, and asthma. Harmful if inhaled.

Chronic Effects/Carcinogenicity: Repeated overexposures or a single large dose, certain individuals may develop isocyanate sensitization (chemical asthma). May cause damage to lungs. Not listed as carcinogens.

4. FIRST AID MEASURES

Eyes: Immediately flush with water at least 15 minutes. Get medical attention immediately.

Skin: Immediately flush with large amounts of water. Remove contaminated clothing. Get medical attention if irritation persists.

Ingestion: Do not induce vomiting. Get medical attention immediately.

Inhalation: Remove to fresh air. Get medical attention immediately.

Note to Physician: **Eyes:** Stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. **Skin:** known skin sensitizer. **Ingestion:** very low oral toxicity no specific antidote.

5. FIRE FIGHTING MEASURES

Flash Point / Method: 390°F (198.8°C) / Pinsky-Martens Closed Cup (ASTM D-93)

Flammable Limits: Not available

Extinguishing Media: Carbon dioxide, foam, or dry chemical.

Protection of Fire Firefighter: Wear full protective equipment and self-contained breathing apparatus.

Fire & Explosion Hazards: None known

Sensitivity to Mechanical Impact: Not available

Sensitivity to Static Discharge: Not available

6. ACCIDENTAL RELEASE MEASURES

Small spill: Absorb spill with inert material (e.g., dry sand or earth).

Large spill: Absorb spill with inert material (e.g., dry sand or earth). Retain for proper removal and treatment.

7. HANDLING AND STORAGE

Storage Temperature (Min/ Max): 64F (18C)/ 86F (30C). **Shelf Life:** 6 months. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the exposure limits.

Respiratory Protection: Use a NIOSH-approved air-purifying respirator with an organic vapor cartridge or canister.

Skin Protection: Neoprene gloves

Eye Protection: Safety goggles

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance: brown

Odor: Musty
Vapor Pressure: <0.00001 mmHg at 77°F
Specific Gravity: 1.24 @ 77°F (25°C)
Solubility in Water: Miscible
pH: Not applicable
Vapor Density: 8.5 (MDI) (air=1)
Evaporation Rate: >1 (butyl acetate=1)
Boiling Point: 406°F (208°C) at 5mm Hg for MDI
Melting Point: < 32°F (0°C) for MDI
Percent Volatiles: 0%
Volatile Organic Compounds: 0 g/L
Coefficient of water/oil distribution: Not available
Odor Threshold: Not available

10. STABILITY AND REACTIVITY

Stability/Conditions to avoid: Stable

Materials to avoid: Heat, Water, amines, strong alkalis, alcohols

Hazardous decomposition products: Carbon dioxide, carbon monoxide, nitrogen oxides, hydrogen cyanide, isocyanate vapor. During a fire, MDI vapors and other irritating highly toxic gases may be generated by thermal decomposition or combustion.

Hazardous polymerization: At temperatures >400F (204C), polymeric MDI can polymerize and decompose which can cause pressure build-up in closed containers. Explosive rupture is possible. Therefore, use cold water to cool fire exposed containers.

11. TOXICOLOGICAL INFORMATION

For 4,4'-diphenylmethane diisocyanate (Monomeric and Polymeric)

LD50 oral (rat) = >10,000 mg/kg

LD50 dermal (rabbit) = >6,200 mg/kg

LC50 inhalation (rat) = 178 mg/m³

12. ECOLOGICAL INFORMATION

Diphenylmethane Diisocyanate : Aquatic Toxicity = LC50 – 24hr. (static): >500mg/L for Daphnia magna, Limnea Stagnalis, and Zebra fish (Brachydanio rerio) for both polymeric and monomeric MDI.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with all current local, state, and federal regulations.

14. TRANSPORT INFORMATION

Technical Shipping Name: Methylene diphenyl diisocyanate

Freight Class Package: Chemicals, NOI (Isocyanate), NMFC 60000

US DOT: Not Regulated when in individual containers of less than the product RQ. Otherwise, see below:

Proper Shipping Name: Other Regulated Substances, Liquid, N.O.S.

Hazard Class or Division: 9

UN/ NA Number: NA3082

Packing Group: 3

Hazardous Substance: MDI, (Methylene diphenyl diisocyanate)

DOT Product RQ lbs (kgs): 11111 lbs (5039.9 kgs)

Hazard label(s): Class 9

Hazard Placard (s): Class 9

Transport Canada: Not regulated

IATA: Not regulated

IMO: Not regulated

15. REGULATORY INFORMATION

US Federal Regulations

TSCA: All components of this product are listed on the TSCA Inventory.

CERCLA (40 CFR 117 & 302): This material contain a Reportable Quantity (RQ) Substance, 4,4'-diphenylmethane diisocyanate, and if 5000 pounds of 4,4'-diphenylmethane diisocyanate are released, notification to the National Response Center, Washington, DC (1-800-424-8802) is required.

SARA Title III (40 CFR 372)

Section 311/312 Hazard Categories: Immediate Health, Delayed Health

Section 313 Reportable Ingredients: Polymeric Diphenylmethane Diisocyanate, CAS# 9016-87-9, 100%; Contained in this polymeric MDI product is 4,4'-Diphenylmethane diisocyanate, CAS# 101-68-8, 0-45%

US State Regulations

Pennsylvania Right-To-Know Act reportable components: Diphenylmethane diisocyanate (CAS# 101-68-8)

California Proposition 65 reportable components: None.

Canadian Regulations

DSL: All components of this product are listed on the Domestic Substances List.

WHMIS Classification: None

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

HMIS Rating: Health-3, Fire-1, Reactivity-1, Personal Protection-H

MSDS prepared by: Joey A. Mucha, Regulatory Affairs Coordinator

Supersedes Date: October 23, 2003

Revision Date: November 16, 2006