

BARRIER SCIENCES GROUP LTD.

Insul-Barrier LD – A & B

CHEMICAL FAMILY: Polyurethane

TRADE NAME: Insul-Barrier LD

TRANSPORTATION EMERGENCY ASSISTANCE / CALL CHEMTREC / 1-800-424-9300

NFPA HAZARD RATINGS

A / B

H - 2 / 2

F - 0 / 0

R - 1 / 0

PP - I / I

DEGREE OF HAZARD: 4=EXTREME 3=HIGH 2=MODERATE 1=SLIGHT 0=INSIGNIFICANT

SECTION II - HAZARDOUS SUBSTANCES

ACGIH % BY WT.	ACGIH TWA	ACGIH STEL	VAPOUR PRESSURE
A: 4,4' Diphenylmethane diisocyanate; CAS# 101-68-8 * B: None Currently Known	50.0 %	0.005ppm	0.0003mm Hg

* THESE CHEMICALS ARE SUBJECT TO SARA TITLE III, SECTION 313 REPORTING

SECTION III - PHYSICAL DATA

BOILING RANGE: A: 646° F (decomposes) B: 212° F (water)	WEIGHT per GALLON: A: 10.2 Lbs. B: 9.2 Lbs.
VAPOR DENSITY (air=1): A: 8.5 B: NA	EVAPORATION RATE (CCl4=1): A: N/A B: <1
% VOLATILE by VOLUME: A: Non-volatile B: 20 %	

SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT: A & B - Non-flammable liquids **LEL:** N/A **UEL:** N/A

EXTINGUISHING MEDIA: Foam, CO₂, dry chemical or water fog.

SPECIAL FIRE FIGHTING PROCEDURES: "B" component boils at less than 100 F and containers must be kept cool with water fog to prevent rupture. Fire fighters must wear self-contained breathing apparatus and full protective clothing to prevent contact with toxic and/or irritating fumes.

UNUSUAL FIRE AND EXPLOSION HAZARD: Contamination of "A" side with water will generate CO₂ gas with possible build-up of pressure in confined spaces. Carbon monoxide may be evolved if combustion is incomplete. Both Polyfoam 060 components are non-flammable and will not explode due to mechanical impact.

WARNING! When exposed to open flame, cured polyurethane foam will present a serious fire hazard.

SECTION V - HEALTH HAZARD DATA

EFFECTS of OVEREXPOSURE: Product vapor can cause lacrimation, conjunctivitis and corneal edema giving rise to the perception of "blue haze" or "fog". The effect is temporary and has no known residual effects.

EMERGENCY & FIRST AID: Eye Contact: Flush with water for 15 minutes and contact a physician as soon as possible. Skin contact: Wash with soap and water and remove contaminated clothing. Ingestion: See a physician.

PRIMARY ROUTES of ENTRY: Dermal or inhalation most likely.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: Repeated exposure can cause an allergic reaction with the development of occupational asthma. Long term exposure to low vapor concentrations may cause chronically progressive pulmonary disease. Repeated skin contact can result in sensitization

SECTION VI - REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Temperature extremes and water contamination.

INCOMPATIBILITY: "A" side reacts with water, alcohols, amines, ammonia and carboxylic acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete burning may produce nitrogen oxides, hydrogen cyanide, carbon monoxide and/or carbon dioxide.

HAZARDOUS POLYMERIZATION: "A" component reacts slowly with water to produce CO₂ gas.

SECTION VII - SPILL or LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: In enclosed areas, cleanup personnel should wear self-contained breathing apparatus. Cover spills with sawdust or other absorbent material to minimize spreading of the material before collecting. "A" component must be neutralized with an equal volume of a 6% ammonia solution in water and allow to react for 10 minutes. Collect into open containers and add more solution. Cover loosely to vent CO₂ gas generated.

WASTE DISPOSAL METHOD: Dispose in accordance with local, state and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use organic vapor cartridges with a mechanical filter to remove airborne particles. Use self-contained breathing apparatus in enclosed areas.

VENTILATION: Mechanical equipment capable of keeping the vapor concentration below the TLV.

PROTECTIVE GLOVES: Chemical resistant rubber or plastic gloves.

EYE PROTECTION: Safety goggles or face shield.

OTHER PROTECTIVE EQUIPMENT: Eye wash & safety shower should be available.

SECTION IX - SPECIAL PRECAUTIONS & TOXICOLOGICAL PROPERTIES

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING & STORING: Keep containers closed and store in a cool dry place away from direct sunlight. Opened "A" side containers should be blanketed with dry nitrogen before resealing if there is no moisture contamination. If water contamination is suspected, do not reseal.

TOXICOLOGICAL PROPERTIES: The International Isocyanate Institute is currently sponsoring a lifetime study on Polymeric MDI in rats for carcinogenicity. Monomeric MDI is positive for mutagenicity in the Ames assay. Oral LD50 (rats) is greater than 15800mg/Kg. Dermal LD50 (rabbits) is greater than 7900 mg/Kg. Inhalation LC50 (rats-2 hours) is greater than 400 mg/M³ on dust of monomeric MDI. DANGER! Harmful or fatal if swallowed. Vapor harmful. May cause skin or eye irritation. Keep out of the reach of children.

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