

# Material Safety Data Sheet

Revision Date: February 2, 2009

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

IN CASE OF EMERGENCY CALL CHEMTREC AT 1-703-527-3887

**Product Name:** Al's Liner Primer  
**Product Type:** Polyurethane Adhesive Primer

**Al's Liner**  
 6184 S. US Hwy 231  
 Cloverdale, IN 46120

**Phone:** 1-800-483-9087  
**Fax:** 765 / 653-7175

## SECTION 2 - HAZARDOUS INGREDIENTS/SARA III INFORMATION

Reportable Components	CAS Number	Vapor Pressure mm Hg @ TEMP	Weight PERCENT	
*Diphenylmethane Diisocyanate	000101-69-8		0.0003	25 C 33.7
OSHA: 0.02 PPM Ceiling ACGIH: .005PPM TWA				

\*Indicates Toxic chemicals subject to the reporting requirements of Section 313 or Title III and of 40 CFR 372.

Information not available.

Information Not available.

N/A = Not Applicable

NOINFO = No Information Available

N.E. = Not Established

## SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE; 392 F  
 SPECIFIC GRAVITY (H<sub>2</sub>O=1) : 1.07  
 VAPOR DENSITY (AIR = 1) 86  
 EVAPORATION RATE: Not Applicable  
 SOLUBILITY IN WATER: Reacts  
 Appearance and odor: clear to yellow viscous liquid.  
 Odor: N/A

## SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 335 F  
 METHOD USED: PMCC  
 FLAMMABLE LIMITS IN AIR BY VOLUME: Lower: N/A Upper: N/A  
 EXTINGUISHING MEDIA: Extinguishing media: Dry chemical extinguishers such as monoammonium phosphate, potassium sulfate, potassium chloride, additionally, carbon dioxide, high expansion (proteinic) chemical foam, water spray for large fires.

**SPECIAL FIREFIGHTING PROCEDURES:** If water is used. Use large amounts as the reaction between hot Isocyanates and water can be vigorous. Use NIOSH-Approved self-contained breathing apparatus and body covering protective clothing.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Water contamination will produce carbon dioxides. Do not re-seal contaminated containers as pressure buildup may rupture.

## SECTION 5 - REACTIVITY DATA

**STABILITY:** Stable - under recommended storage conditions.

**CONDITIONS TO AVOID:** Special sensitivity ( Heat, Light, Moisture): This product is Hygroscopic. Containers should be tightly sealed to prevent moisture contamination. Do not expose to high temperatures for any length of time.

**INCOMPATIBILITY (MATERIALS TO AVOID):** Water, acid, bases, metal compounds and surface active materials, avoid water as it reacts to form eat, co2 and insoluble urea, the combined effect of the co2 and heat can produce enough pressure to repute a closed container. Some reactions are violent in the presence of this above mentioned materials.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:** Isocyanate vapor and mist, carbon dioxide, carbon dioxide, nitrogen oxides and traces of hydrogen cyanide.

**HAZARDOUS POLYMERIZATION:** may occur with incompatible reacttants, especially strong bases, water or temperatures over 347 F (175 C.). Temperatures over 120 F (49 C) accelerate the reaction with water.

## SECTION 6 - HEALTH HAZARD DATA

**ANIMAL TOXICITY:**

ORAL, LD50 (INGESTION): >10,000mg/kg (Rats)

DERMAL, LD50 (SKIN CONTACT): >10,000 mg/kg (Rabbits)

INHALATION, LC50 (4HR): Approx. 370 mg.m3 (Rats)

AQUATIC, LC50 (24HR): >500 mg/l (Dapnea, Limna invertebrates & Zebra fish)

EYES: Not irritating (Rabbits) OSCD guidelines

SKIN: Slight irritation (Rabbis) OECI guidelines & Sensitizer in Guinea pigs.

**INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** Inhalation may cause respiratory sensitization in susceptible individuals. At room temperatures, vapors are minimal due to low vapor pressure. If heated or sprayed as an aerosol. Excessive concentrations are attainable that could be hazardous on single exposure. Excessive

exposure may cause irritation of the eyes, upper respiratory tract and lungs. Effects may be delayed, Decreased ventilation capacity has been associated with exposure to similar isocyanates; it is possible that exposure to

Page 3 of 5 pages

TDI-MDI may cause impairment of lung function.

**SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** Skin contact: Remove product and immediately flush affected area with water for at least 15 minutes. Remove contaminated clothing and shoes. Wash before reuse. Launder contaminated clothing prior to reuse. Contaminated leather wear should be discarded. Call a physician. Victims of a major shin area contact should remain under medical observation for at least 24 hours due to possible delayed effects. Eye Contact: Following eye contact. Flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

**SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** May cause allergic skin reaction in susceptible individuals. Prolonged or repeated contact may cause skin irritation. May stain the skin.

**INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:** Ingestion: This is not considered a common occupational route of exposure, and single dose toxicity is low. Do not induce vomiting. Consult physician immediately.

**HEALTH HAZARDS (ACUTE AND CHRONIC):** Inhalation: May cause respiratory sensitization in susceptible individuals. At room temperature, vapors are minimal due to low vapor pressure. If heated or sprayed as an aerosol, excessive concentrations are attainable that could be hazardous on single exposure. Excessive exposure may cause irritation of the eyes. Upper respiratory tract and lungs effects may be delayed. Decreased ventilation capacity has been associated with exposure to similar isocyanates: it is possible that exposure to TDI-MDI may cause impairment of lung function.

**CARCINOGENICITY;**  
NTP CARCINOGEN: No  
IARC MONOGRAPHS: No  
OSHA REGULATED: No  
Information not available.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Pre existing medical conditions which may be aggravated by exposure include, but not limited to, chronic respiratory and skin disease and central nervous system disorders.

**EMERGENCY AND FIRST AID PROCEDURES:** Note to physicians - no specific antidote. Supportive care, treatment based on judgement of physician in response to reactions of this patient. The manifestations of respiratory systems, include pulmonary edema, resulting from acute exposure, may be delayed. May cause respiratory sensitization. Emergency/First Aid: Eye contact - flush with clean, luke warm water at low pressure for at least 15 minutes. Occasionally lifting eyelids. Consult a physicians immediately. Emergency/First aid: Ingestion - no adverse effects anticipated by this route of exposure incidental to proper industrial handling. Emergency/First aid: Skin Contact - Remove contaminated clothing. Was exposed area with warm soapy water

thoroughly. Contaminated clothing should be properly laundered before reusing.  
Emergency/First aid: Inhalation - Remove victim from area of exposure to safe area. If not breathing give mouth to mouth resuscitation. If breathing is difficult. Give Oxygen. Consult a physicians immediately.

## SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: release or spill: clean up - Decontaminate area using water/ammonia solution with 1-2% added detergent, letting it stand over affected area for at least 10 minutes. Cover mop, brooms, etc. used for this with plastic and dispose of properly.

Release or Spill: Minor Spills - Contain the spilled material and then cover with a loose absorbent material such as Ultra, Vermiculite, sawdust or Puller's Saith. Shovel waste material into proper waste container. Do not make pressure tight. Transport to a well-ventilated area and treat with a neutralizing solution consisting of a mixture of water and 30% concentrated Ammonium Hydroxide or 5-10% Sodium Carbonate. Add about 10 parts of neutralizer per part of Isocyanate with mixing. Allow to stand 48 hours, letting evolved co2 escape.

Release or Spill: Major Spills - Call manufacturer immediately! If it is a transportation spill, notify CHEMTREC (800) 424-9300. Evacuate and ventilate spill area . Dike spill to prevent entry into the environment. Wear full protective equipment including respiratory protection during cleanup.

Release or Spill: Major Spills - If temporary control of isocyanate vapor is required, a blanket of protein foam may be placed over the spill. Large quantities may be pumped into closed but not sealed containers for disposal.

WASTE DISPOSAL METHOD: Waste material may be incinerated or disposed of under local, state and federal regulations controlling environmental protection.

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Storage Temperature - (min/Max) 56 F to 85 F

Average Shelf Life - 6 months from date of Mfg.

Special Sensitivity (Heat - Light - Moisturize) - This product is reactive with water. Containers should be tightly sealed to prevent moisture contamination. A nitrogen blanket should be used for bulk storage. Store at a temperature of 65 F to 85 F. Protect from freezing.

Contamination - If contamination of the MDI is suspected. Do not re-seal container because of possible reupture due to pressure buildup. Always slowly vent container when opening to relieve any pressure buildup.

### OTHER PRECAUTIONS

Handling and Storage: Precautions - If contamination of the TDI-MDI is suspected. Do not re-seal container because of possible reupture due to pressure buildup. Always slowly vent container when opening to relieve any pressure buildup.

## SECTION 8 - CONTROL MEASURES

**RESPIRATORY PROTECTION:** This product has demonstrated no observable effect at room temperature, however it is highly recommended that an air purifying respirator with organic filter cartridges be worn. In addition, in any spray application a supplied air source must be provided.

**VENTILATION:** Natural or Mechanic. Local exhaust will keep the TLV below minimum in most cases. Spills or other emergencies may require more forceful ventilation means.

Page 5 of 5 pages

**PROTECTIVE GLOVES:** Skin Protection: Chemical resistant gloves such as natural rubber, or polyvinyl alcohol. Cover as much exposed skin as possible with appropriate clothing. If skin creams are used, keep the area covered by the cream to a minimum.

**EYE PROTECTION:** Liquid chemical goggles or full face shield. No contact lenses should be worn.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Safety showers and eye wash stations should be provided in all work areas. All employees should be properly trained.

**WORK/HYGIENIC PRACTICES:** Safety showers and eye wash stations should be provided in all work areas. All employee should be properly trained.

## **SECTION 9 - REGULATORY INFORMATION**

**PROPER SHIPPING NAME:** Methylene diphenyl Diisocyanate

**HAZARD CLASS:** 9

**UN NUMBER:** NA3082 Packing Group III

**FREIGHT CLASS (BULK):** Methylene diphenyl diisocyanate

**FREIGHT CLASS (PACKAGE):** Chemicals, NOI (Isocyanate), MNFC 60000

**PRODUCT LABEL:** Product Label Established

**PLACARDS REQUIRED:** Class 9

**TSCA:** All ingredients are in the TSCA Inventory of Chemical Substances and/or are otherwise in compliance with TSCA.

## **SECTION 10 - COMMENTS**

The information contained in this material Safety Data Sheet is based on the neat or concentrated product as shipped.

NOTE: The data in this Material Safety Data Sheet relates only to the material designated herein, and does not relate to use in combination with any other material, or in any process. The information herein is furnished free of charge, and is based upon technical data that Scorpion Protective Coatings, Inc. believes to be reliable, and to the best of our knowledge, accurately reflects the properties and effects of the hazardous components. This product is intended for use by persons having technical skills, and at their own discretion and risks. Because conditions of use of this material are outside our control, we make no warranties, expressed or implied, and assume no liability in connection with any use of this material

-END OF MSDS-