

1. PRODUCT AND COMPANY IDENTIFICATION

Company:	Dura-Line Corporation
Address:	11400 Parkside Drive, Suite 300, Knoxville, TN 38934
Telephone:	(865) 218-3460; (800) 847-7661; Fax (865) 223-5085

Product Use:Polyurethane SealantHMIS Rating:Health: 3 Flammability: 1 Reactivity: 1NFPA Rating:Health: 13 Flammability: 1 Reactivity: 1PIN:NoneRevision date:August 15, 2014

Key:0 - minimal3 - serious1 - slight4 - severe2 - moderate

2. HAZARDS IDENTIFICATION

The ingredients in this product are considered to be essentially non-hazardous as formulated. The exposure limits listed for various mineral fillers indicate hazards associated with breathing respirable dust particles, which is unlikely when using the final formulated product. Ingredients include:

<u>Ingredient</u>	<u>Wt. %</u>	<u>CAS Number</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>
4,4'-Diphenylmethane Diisocyanate	15 - 35	101-68-8	0.005	N.E.
Diphenylmethane Diisocyanate	1 – 10	26447-40-5	N.E.*	NE
Higher Oligomers of MDI	>55	9016-87-9	N.E.	N.E.

* Not Established

3. COMPOSITION INFORMATION

EMERGENCY OVERVIEW: Viscous, Brown liquid; slight odor. Avoid contact with skin or eyes. May cause eye, skin and respiratory tract irritation. Harmful if inhaled. May cause allergic respiratory reaction. May cause allergic skin reaction. Refer to other (M)SDS sections for further details.

POTENTIAL HEALTH EFFECTS:

Skin Contact: May cause skin irritation. Prolonged or repeated skin exposure can cause redness, swelling, rash, and, in some cases, skin sensitization. Individuals who have skin sensitization can develop these systems from contact with liquid or vapor.

Eye Contact: Liquids and vapors are irritating and can cause tearing, redness, swelling and, if left untreated, possible corneal damage.

Inhalation: Although MDI is low in volatility, an inhalation hazard can exist from MDI vapors formed during heating or foaming. MDI vapors can irritate mucous membranes in the respiratory tract. May form sensitization with chronic exposure.

Ingestion: Can result in irritation and corrosive action in the mouth, stomach tissue, and digestive tract.

Medical conditions known to be aggravated by exposure to product: Persons with impaired lung function may experience additional breathing difficulties due to the irritant properties of this material. Pre-existing skin problems may be aggravated by prolonged or repeated contact.



4. FIRST-AID MEASURES

Skin Contact: persists.	Remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation
Eyes:	In case of contact, immediately flush with plenty of water for at least 15 minutes and get medical attention if irritation persists.
Inhalation:	If irritation of nose or throat develops, move to fresh air. If irritation persists, seek medical attention. If breathing is difficult, provide oxygen. Seek immediate medical attention.
Ingestion:	Do not induce vomiting. Give 1 to 2 cups of milk or water to drink. Never give anything by mouth to an unconscious person. Never give anything by mouth to an unconscious person.

NOTE: In all severe cases, contact physician immediately. Local telephone operators can furnish number of regional poison control center.

5. FIRE FIGHTING MEASURES

Conditions of Flammability:	Unknown.	
Flash Point:	> 300 °F (PMCC)	
Flammable Limits in Air:	Not determined.	
Extinguishing Media:	Carbon dioxide, dry chemicals, water spray	
	for large fires.	
Special Fire Fighting Procedures:	Keep containers cool. Protect against	
	inhalation of isocyanate vapors.	
Hazardous Combustion Products:	Isocyanate vapors, carbon dioxide, carbon	
	monoxide, nitrogen oxides, traces of HCN.	
Unusual Fire Hazards:	Self-containing air masks should be used to	
enter	smoky area in the event of a fire.	

6. ACCIDENTAL RELEASE MEASURES

Clean immediately using suitable absorbent (clay, sand, dirt, etc.) Shovel into open top container in a well-vented area and treat with neutralizing solution (5% ammonium hydroxide in water), allowing 48 hrs for evolved CO2 to escape. Notify local health authorities and other appropriate agencies if product enters streams or drinking water supplies.

7. HANDLING AND STORAGE

Use and store with adequate ventilation. Store between 60 °F and 85 °F. Avoid breathing vapors and contact with skin and eyes. Store in tightly closed containers to protect from atmospheric moisture. Protect from freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Controls:	Normal ventilation adequate when used as intended. (DO NOT HEAT OR SPRAY
	APPLY!) If exposure exceeds recommended limits, respirator protection is
	recommended.
Personal Protection:	Wear safety glasses to protect eyes. Impermeable gloves are recommended to prevent possible irritation if skin contact is repeated or prolonged. Respirator, if required, should be a properly
	irritation if skin contact is repeated or prolonged. Respirator, if required, should be a properly



9. PHYSICAL AND CHEMICAL PROPERTIES

Initial Boiling Point (bulk): Percent Volatile: Density/ Sp. Gravity: Water Solubility: VOC Content: 406 °F Not determined 10.3 lbs/gal Not Soluble, Reacts None Vapor Pressure: Vapor Density (air = 1): Evaporation Rate (nBu Ac = 1): Appearance: Odor: < 1x10-5 mmHg @ 25C >1 Much less than 1 Brown liquid Slight odor

10. STABILITY AND REACTIVITY

Stability:	Stable.
Incompatibility (Materials to Avoid):	Water, amines, strong
	bases, alcohols, strong
	oxidizing agents
Hazardous Polymerization:	May occur with strong
	bases, water or at
	temperatures over
	175°C
Hazardous Decomposition Products:	Isocyanate vapor, carbon
	dioxide, carbon
	monoxide, nitrogen
	oxides and traces of
	HCN.
Conditions to Avoid:	Avoid freezing, high
	temperatures, Water

11. TOXICOLOGICAL INFORMATION

Carcinogenicity:Contains no known or suspected carcinogens listed with OSHA, IARC, NTP, or ACGIH.Threshold Limit Value:0.005 ppm (MDI) (NOTE: product has very low vapor pressure at ambient temperatures).WHMIS Information:Mutagenicity: Ames Salmonella - positive (MDI). There is no conclusive evidence that MDI is
carcinogenic, teratogenic or that it causes reproductive effects in animals or in humans.

12. ECOLOGICAL INFORMATION

Ecotoxicological and Chemical Fate Information:

Aquatic toxicity: LC50-24 hrs (static): > 500 mg/L for *Daphnia magna*, *limnea*, *stagnalis*, and Zebra fish (*Brachydanio rerio*) for both polymeric and monomeric MDI.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state, and local regulations. Bury in approved landfill, or incinerate in approved incinerator according to federal, state, and local regulations. "Empty" containers retain product residue and must be handled carefully.



RCRA: Cured polyurethane is not considered a RCRA hazardous waste.

14. TRANSPORT INFORMATION

DOT Proper Shipping Name: DOT Hazard Class or Division: UN/NA Number: IATA/ICAO: None, not restricted. None. None, not restricted

15. REGULATORY INFORMATION

TSCA: All ingredients listed in TSCA inventory. CERCLA: Not reportable. SARA TITLE III, Section 302: Contains nothing on this list at or above de minimus amounts. SARA TITLE III, Section 313: 4,4'-Diphenylmethane Diisocyanate (MDI) Classified under: (CAS No. 101-68-8) - approximately 35 %. SARA, Section 311, 312: IMMEDIATE HEALTH / DELAYED HEALTH / REACTIVE HAZARD. California Proposition Contains nothing on this list. 65: WHMIS Hazard Class (Canada): D1B, D2A, D2B.

16. OTHER INFORMATION

Revision Statement: Review, Update Form Supersedes: 11 October, 2000

These data are offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is made. The recommended handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific content of the intended use.

