

MSDS

Material Safety Data Sheet

May 18, 2000

Revised: December 10, 2001

PRODUCT NAME: ELASTO-THANE™ 227 GUNGRADE (B-COMPONENT)

ITEM NUMBER: ET227GG-B

DESCRIPTION: TWO COMPONENT 100% SOLID POLYURETHANE SEALANT

HMIS CODES:	H:*	2	F:	2	R:	1	P:	G
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SECTION I - IDENTIFICATION

MANUFACTURER'S NAME: **Pacific Polymers International, Inc.**

12271 Monarch Street, Garden Grove, CA 92841

Telephone: 714-898-0025

EMERGENCY PHONE NO: 800-424-9300 (CHEMTREC)

SECTION II-HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS / CAS #	OSHA PEL	ACGIH TLV	OSHA STEL	LD50/LC50	WT %
Diphenylmethane Diisocyanate (MDI) #26447-40-5	0.005ppm	0.02ppm	0.02ppm		
Butyl Benzyl Phthalate #85-68-7	No data	No data	No data		

All Chemicals comprising this product are listed on the Toxic Substance Control Act (TSCA) inventory.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	>400F
Vapor Density (Air = 1)	8.5 (MDI)
Vapor Pressure (mm Hg)	<0.0001 @20C (MDI)
Specific Gravity (H2O=1)	1.05
Evaporation Rate	Not applicable
Solubility in water	Will react slowly with water.
Appearance and odor	Pale yellow liquid mixture. Mild aromatic odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point	427°F (COC)
Flammable limits in air by volume	LEL: N.av. : UEL: N.av.
Extinguishing media	In case of fire, use dry chemical, foam, carbon dioxide, halogenated agents. The reaction between water and hot isocyanate may be vigorous. Water usage will help cool down the containers.
Special Firefighting Procedures	Do not inhale vapors. Wear self-contained breathing apparatus with full-face piece and protective clothing.
Unusual Fire and Explosion Hazards	Water contamination will produce carbon dioxide. Do not reseal contaminated containers as pressure buildup may rupture them.

SECTION V - REACTIVITY DATA

Stability	Stable under normal conditions.
Conditions to avoid	Avoid water contact, alcohol, amines, acids and alkalis.
Incompatibility (Materials to avoid)	This material will react with any materials containing active hydrogen group such as water, alcohol's, ammonia, amines, alkalis and acids.
Hazardous Decomposition or Byproducts	Combustion products: carbon dioxide, carbon monoxide, and nitrogen oxides trace amounts of hydrogen cyanide.
Hazardous Polymerization	May occur. High temperatures in the presence of alkalis, amines, and metal compounds will accelerator polymerization. Possible evolution of carbon dioxide gas may rupture closed containers.

SECTION VI - HEALTH HAZARD DATA

Health risks and symptoms of exposure

Inhalation	Inhalation may cause coughing, nausea, tightness of chest with difficulty in breathing, and headache.
Skin Contact	Skin contact may result to irritation causing redness and itching.
Eye Contact	In case of eye contact, possible eye irritation if not washed immediately. May result in tearing, redness and/or burning effect of eyes.
Ingestion	May cause irritation to mouth, pharynx, and esophagus and stomach tissues.

Health hazards (acute & chronic):

CARCINOGENICITY: NTP? NO ; IARC MONOGRAPHS: NO ; OSHA REGULATED: NO

Medical conditions generally aggravated by exposure: Prolonged and repeated exposure may result to respiratory sensitization, asthma like conditions, central nervous depression (dizziness, nausea, headache etc), skin sensitization and allergic skin reactions (rashes, hive-like, acme's, itching, etc.)

Emergency & First Aid Procedures

Eyes	Immediately flush eyes with plenty of water for at least 15 minutes. Keep eyelids wide open. Consult physician immediately to have eyes examined and treated accordingly.
Skin	Wash material off the skin with plenty of soap and water. If redness, itching, or burning develops, consult a physician immediately.
Inhalation	Remove person to fresh air. If not breathing, give artificial respiration, preferable mouth to mouth. If breathing is labored, give oxygen. Get medical help immediately. DO NOT GIVE ANY FOOD OR FLUIDS TO AN UNCONSCIOUS PERSON.
Ingestion	Give 1 to 2 glasses of water to drink. If gastrointestinal symptoms develop, consult medical personnel immediately. NEVER GIVE ANYTHING BU MOUTH TO AN UNCONSCIOUS PERSON.

SECTION VII - SAFE HANDLING & USE INFORMATION

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear protective equipment and clothing during cleanup. Soak up material with absorbent and shovel into a chemical waste container. Cover the container but do not seal, and remove from work area. Use decontamination solution of 0.5% liquid detergent, 3 – 8 % concentrated ammonium hydroxide and remaining water. Clean the area off spill with the solution.

WASTE DISPOSAL METHOD. Neutralize the waste with the decontamination solution. Let it stand for 48 hours, allowing carbon dioxide to vent away. Dispose the waste in accordance to federal, local, and state regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Prevent skin and eye contact. Avoid breathing vapors and mist. A sensitized person should not be allowed to exposed to the product. Store in tightly sealed containers to protect from atmospheric moisture. Store in dry area.

OTHER PRECAUTIONS: Individuals with existing respiratory disease such as chronic bronchitis, emphysema or asthma like conditions should not be exposed to isocyanates or related products. Do not drink, eat, or smoke while working with the product. Wash before such an activity. KEEP AWAY FROM CHILDREN. Keep away from ignition sources such as fire, flame, sparks etc.

SECTION VIII - CONTROL MEASURES/PROTECTION INFORMATION

RESPIRATORY PROTECTION: Not required under normal conditions after mixing with the A-component. However if required, wear MSHA/NIOSH approved organic vapor or charcoal filtered cartridge respirator to avoid any inhalation.

VENTILATION: local and or mechanical exhaust.

PROTECTIVE GLOVES: Nitrile, neoprene, and butyl rubber gloves.

EYE PROTECTION: Chemical tight goggles, full faceshield in addition if splashing is possible.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: WORK/HYGIENIC PRACTICES: Tyvek, neoprene, butyl, nitrile rubber based clothing have excellent resistance polyisocyanate based products. Provide eyewash station and safety showers in the work area. Provide emergency safety plans if regulations require. Give proper training of the usage and application of the products.

SECTION IX – REGULATORY INFORMATION

Transportation: DOT: Non-Regulated

Sara Title III (Section 313 Toxic Chemical Information):

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Concentration</u>
None known		

California Proposition 65:

As per requirements of the Safe Drinking Water & Toxic Enforcement Act of California, USA (1986), the public is warned that materials used in this product may create an exposure to chemicals known to the State of California to cause cancer, birth defects, or reproductive harm. This warning is required by Section 25249.6 of the California Health and Safety Code.

{The following detectable components of this product are substances, or belong to classes of substances, known to the state of California to cause cancer and /or reproductive toxicity.}

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Concentration</u>
None known		

HMIS Ratings: Health: 2
Flammability: 1
Reactivity: 1
Protection: G (gloves, goggles, coverall/apron, respirator)

WHMIS Rating (Canada): Class B, Division 3, Class D, Division 2, Subdivision B.

Disclaimer: The data set forth in this MSDS are based on information provided by the suppliers of the raw materials and chemicals used in the manufacture of the aforementioned product. Pacific Polymers International, Inc. makes no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereof.