



Pacific Polymers

A Division of **ITW**

12271 Monarch Street
Garden Grove, CA 92841
(800) 888-8340

MATERIAL SAFETY DATA SHEET

NAME OF PRODUCT ELASTO-THANE 920 B-COMPONENT

MSDS DATE: 12 / 14 / 2009

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ELASTO-THANE 920 [B-COMPONENT]
PRODUCT CODES: ET920-B

MANUFACTURER: PACIFIC POLYMERS
DIVISION: A DIVISION OF ITW
ADDRESS: 12271 MONARCH STREET, GARDEN GROVE, CA 92841
INFORMATION PHONE: 714-898-0025
FAX NUMBER: 714-898-5687

EMERGENCY PHONE: 1-800-424-9300 CHEMTREC

CHEMICAL NAME: CURING AGENT
CHEMICAL FAMILY: POLYAMINE

PRODUCT USE: CURING AGENT FOR JOINT SEALANT
PREPARED BY: PACIFIC POLYMERS

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Components</u>	<u>CAS #.</u>	<u>WT%</u>
Polyamide Amine	mixture	> 80%
Diethylenetriamine	111-40-0	<10%
Triethylenetetramine	112-24-3	<10%
Benzyl alcohol	100-51-6	<8%

Exposure Limits:

Diethylenetriamine	Time Weighted Average (TWA): ACGIH	1ppm
Diethylenetriamine	Recommended Exposure limit (REL): NIOSH	1ppm (4mg/m3)
Diethylenetriamine	Time Weighted Average (TWA): OSHA Z1A	1ppm (4mg/m3)
Diethylenetriamine	Time Weighted Average (TWA) PEL	1ppm (4 mg/m3)
Triethylenetetramine	Time Weighted Average (TWA): WEEL	1 ppm (6mg/m3)

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Corrosive Liquid Mixture
Components of the product may affect the nervous system.
Severe eye irritant.
Severe respiratory irritant.
Severe skin irritant.

ROUTES OF ENTRY: inhalation, eye, skin, ingestion

POTENTIAL HEALTH EFFECTS

ACUTE:

INHALATION: Harmful if inhaled and may cause delayed lung injury. Can cause respiratory burns. Risk of serious damage to the lungs (by inhalation). May cause nose, throat, and lung irritation. Inhalation of aerosol may cause irritation to the upper respiratory tract. May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure. Inhalation of vapors and/or aerosols in high concentration may cause irritation.

Eye contact : Causes eye burns. May cause blindness. Severe eye irritation.

Skin contact : Causes skin burns. If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties.



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Ingestion : If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Chronic Health Hazard : This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent damage.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

prolonged or repeated exposure may cause allergic skin reactions. Prolonged or repeated inhalation may cause respiratory asthma like symptoms.

SECTION 4: FIRST AID MEASURES

General advice : Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Eye contact : Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.

Skin contact : Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing.

Ingestion : Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side.

Inhalation : If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: no data
(% BY VOLUME) **LOWER:**

FLASH POINT: 112°C (234°F)

AUTOIGNITION TEMPERATURE: no data

HMIS HAZARD CLASSIFICATION

HEALTH: 3 **FLAMMABILITY:** 1 **REACTIVITY:** 0
PROTECTION: glove, goggles, respirator, coverall/apron

EXTINGUISHING MEDIA: Alcohol-resistant foam, Carbon dioxide (CO₂), Dry chemical, Dry sand, Limestone powder.

SPECIAL FIRE FIGHTING PROCEDURES: Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear self contained breathing apparatus for firefighting if necessary. Downwind personnel must be evacuated.

HAZARDOUS DECOMPOSITION PRODUCTS: : Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes.

SECTION 5 NOTES: Do not allow run-off from fire fighting to enter drains or water courses., Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear suitable protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing. Evacuate personnel to safe areas.

Environmental precautions : Construct a dike to prevent spreading.

Methods for cleaning up : Contact Air Products' Emergency Response Center for advice. Approach suspected leak areas with caution. Place in appropriate chemical waste container.



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Additional advice : Open enclosed spaces to outside atmosphere. If possible, stop flow of product.

SECTION 7: HANDLING AND STORAGE

HANDLING: Use only in well-ventilated areas. Avoid breathing vapors and/or aerosols. Avoid contact with skin and eyes. Avoid contact with eyes. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Use personal protective equipment. When using, do not eat, drink or smoke.

STORAGE: Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place. Product may partially freeze with extended exposure to cold temperatures, resulting in crystallization, haziness or separation. If this occurs, product should be warmed to 100-140F (38-60C) for one hour and stirred until clear. Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

RESPIRATORY PROTECTION: Wear appropriate respirator when ventilation is inadequate.

EYE PROTECTION: Chemical resistant goggles must be worn. If splashing is suspected, wear full shield with goggles underneath.

SKIN PROTECTION: Butyl-rubber, Nitrile rubber, Neoprene gloves, Impervious gloves, PVC disposable gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Impervious clothing. Full rubber suit (rain gear). Rubber or plastic boots. Long sleeve shirts and trousers without cuffs. Slicker Suit.

WORK HYGIENIC PRACTICES: Discard contaminated leather articles. Provide readily accessible eye wash stations and safety showers. Wash at the end of each work shift and before eating, smoking or using the toilet.

EXPOSURE GUIDELINES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid
Color : clear to straw
Odor : Ammonia like
Weight per Gallon: 8.40 – 8.50 lb
Vapor pressure : no data
Specific Gravity : 1.008 – 1.02 g/cm³ @ 70 °F (21 °C)
pH : Alkaline
Boiling point: 405 °F (207 °C)
Flash point : 233 °F (112 °C)
Water solubility : < 0.1 g/liter

SECTION 10: STABILITY AND REACTIVITY

Stability : Stable under normal conditions.

Materials to avoid : Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds. Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. Sodium hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agents.

Hazardous decomposition products: Nitric acid. Ammonia, Nitrogen oxides (NOx). Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide (CO₂). Aldehydes, Flammable hydrocarbon fragments.



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SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Ingestion: LD50 (rat) → 3710 mg/kg

Inhalation: no data is available entire product. Data available on the component listed.

Diethylenetriamine: LC50 (rat)(4hr) → > 0.07 - < 0.3 mg/l

LD50 (rabbit) (skin) → > 1000 mg/kg

Note: Information taken from raw materials used for the product.

Acute Health Hazard

Ingestion : LD50 : > 2,000 mg/kg (rat)(estimated)

Inhalation : No data is available on the product itself.

Skin. : LD50 : > 1000 mg/kg (rabbit)

Eye irritation/corrosion : Severe eye irritation.

Acute dermal irritation/corrosion: Severe skin irritation.

Sensitization : May cause sensitization of susceptible persons by skin contact.

Inhalation data on Component

Benzyl alcohol LC50 (4 h) : > 4.178 mg/IOECD Test Guideline 403 (rat)

Skin. : LD50 : > 2,110 mg/kg (rabbit)

Chronic Health Hazard:

Polyamine: short term genotoxicity tests on the polyamine or its components indicate mutagenic activity.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:

No data is available on the product itself.

Components:

Toxicity to fish - Components

Benzyl alcohol LC50 (96 h) : 10 mg/l Species : Bluegill sunfish (*Lepomis macrochirus*).

Benzyl alcohol LC50 (96 h) : 460 mg/l Species : Fathead minnow (*Pimephales promelas*).

Toxicity to algae – Components

Benzyl alcohol IC50 (72 h) : 700 mg/l Species : Algae.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Dispose of container and unused contents in accordance with federal, state, and local requirements.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: Amines, Liquid, Corrosive n.o.s. (Diethylenetriamine , Triethylenetetramine)

HAZARD CLASS: 8

ID NUMBER: UN2735

PACKING GROUP: III

LABEL STATEMENT: Corrosive

WATER TRANSPORTATION (IMDG)

PROPER SHIPPING NAME: Amines, Liquid, Corrosive n.o.s. (Diethylenetriamine , Triethylenetetramine)

HAZARD CLASS: 8

ID NUMBER: UN2735

PACKING GROUP: III



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AIR TRANSPORTATION (IATA)

PROPER SHIPPING NAME: Amines, Liquid, Corrosive n.o.s. (Diethylenetriamine , Triethylenetetramine)

HAZARD CLASS: 8

ID NUMBER: UN2735

PACKING GROUP: III

LABEL STATEMENT: Corrosive

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): All ingredients used for the product are listed in TSCA Inventory.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): none known

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

311/312 HAZARD CATEGORIES: Acute Health Hazard

313 REPORTABLE INGREDIENTS: None known

STATE REGULATIONS:

California Proposition 65: To the best of our knowledge this product does not contain any chemical known to the State of California to cause cancer, birth defects or any other harm.

INTERNATIONAL REGULATIONS:

WHMIS Hazard Classification: (based on the polyamine used)

Class E, Class D, Division 2, Subdivision B

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: December 14, 2009

DISCLAIMER: A MSDS such as this cannot be expected to cover all possible individual situations. The end user of this product has the responsibility to provide a safe workplace. All aspects of an individual operation should be examined to determine if, or where, precautions – in addition to those described herein – are required. Any health and safety information contained herein should be passed on to your customers and/or employees.

The opinions expressed herein are those of qualified experts within Pacific Polymers. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and the use of this product are not within the control of Pacific Polymers final determination of suitability of this product is the sole responsibility of the user. It is the responsibility of the user to comply with all applicable Federal, State and Local laws and regulations.