

MATERIAL SAFETY DATA SHEET

2919 ADHESION PROMOTER CATALYST

===== SECTION I

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===== SECTION 2 – HAZARDOUS INGREDIENTS/IDENTITY

HAZARDOUS COMPONENTS	CAS #	OSHA-PEL	ACGIH-TLV	CONCENTRATION
HOMOPOLYMER	28182-81-2	N/E	N/E	100%
HEXAMETHYLENE DIISOCYANATE	822-06-0	N/E	.005 PPM TWA	<0.07%

=== SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point: Not measurable owing to decomposition.
Evaporation Rate: SLOWER THAN ETHER
Solubility in Water : Resin is insoluble – reacts slowly with water to liberate CO₂ gas.
Appearance & odor: CLEAR/PALE YELLOW. Negligible nearly odorless.
Coating V. O. C.: .785 grams/liter
Specific Gravity (H₂O=1): 1.11 – 1.13 @ 77 Deg F
Vapor Density (Air = 1) LIGHTER THAN AIR

=== SECTION 4 – FIRE & EXPLOSION DATA

Flash Point: 385 Deg F
Method Used: Setaflash ASTM D-3243, D-3278, D-3828)
Flammable Limits in Air NOT ESTABLISHED
% by Volume:
Extinguisher Media: FOAM, CO₂, DRY CHEMICAL, WATER SPRAY FOR LARGE FIRES
Special Fire: WEAR SELF-CONTAINED BREATHING APPARATUS AND
Fighting Procedures: PROTECTIVE CLOTHING TO PROTECT AGAINST HAZARDOUS EFFECTS OF NORMAL COMBUSTION.
Unusual Fire & Explosion Hazards: None reported for this product.

HMIS RATING

HEALTH 2
FLAMMABILITY 1
REACTIVITY 1
PERSONAL PROTECTION B

===== SECTION 5 – PHYSICAL HAZARDS (REACTIVITY DATA)

Stability: Stable under normal conditions.
Incompatibility (Materials to Avoid): Water, amines, strong bases, alcohols, metal compounds and surface active materials.
Hazardous Decomposition Products: By high heat and fire: carbon dioxide, carbon monoxide, oxides of nitrogen, HCN, HDI and other undetermined aliphatic fragments.
Hazardous Polymerization: May occur; Contact with moisture or other materials which react with isocyanates or temperatures above 400 F may cause polymerization.

===== SECTION 6 – HEALTH HAZARD

Acute Inhalation:	HDI vapors or mist at concentrations above the TLV or MGL can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a pre-existing, nonspecific bronchial hyperactivity can respond to concentrations below the TLV or MGL with similar symptoms as well as an asthma attack. Exposure well above the TLV or MGL may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). These effects are usually reversible. Chemical or hypersensitive pneumonitis, with flu-like symptoms (e.g.; fever, chills) has also been reported.
Acute Ingestion:	Can result in irritation and possible corrosive action in the mouth, stomach tissue and digestive tract.
Acute Skin Contact:	Isocyanates react with skin protein and moisture and can cause irritation. Symptoms of skin irritation may be reddening, swelling, rash, scaling or blistering. Some persons may develop skin sensitization from skin contact. Cured material is difficult to remove.
Chronic Eye Contact:	May result in corneal opacity (clouding of the eye surface).
Medical Conditions Generally Aggravated by Exposure:	Asthma and other respiratory disorders (bronchitis, emphysema, hyperactivity), skin allergies, eczema.

CARCINOGENICITY: NTP? *NO*. **IARC MONOGRAPHS?** *NO*. **OSHA?** *NO*.

Emergency & First Aid Procedures:

- 1. Eye Contact:** IMMEDIATELY FLUSH EYES W/RUNNING WATER FOR AT LEAST 15 MINUTES WHILE HOLDING THE EYELIDS OPEN. IF IRRITATION PERSISTS, CALL A PHYSICIAN.
- 2. Skin Contact:** WASH SKIN THOROUGHLY W/MILD SOAP & WATER. LAUNDER CONTAMINATED CLOTHING. IF IRRITATION PERSISTS, CALL A DOCTOR.
- 3. Inhalation:** IF THERE ARE ACUTE OR CHRONIC SYMPTOMS, MOVE PERSON TO FRESH AIR, GIVE ARTIFICIAL RESPIRATION, SEEK MEDICAL CARE. TREATMENT IS ESSENTIALLY SYMPTOMATIC. ASTHMATIC-TYPE SYMPTOMS MAY DEVELOP AND MAY BE IMMEDIATE OR DELAYED UP TO SEVERAL HOURS.
- 4. Ingestion:** DO NOT INDUCE VOMITING. GIVE 1 TO 2 CUPS OF MILK OR WATER TO DRINK. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. CONSULT A PHYSICIAN.

===== SECTION 7 – SPECIAL PRECAUTIONS & SPILL/LEAK PROCEDURES

Precautions to be taken:	STORE & USE IN A WELL-VENTILATED AREA.
In Handling & Storage:	DO NOT USE NEAR OPEN FLAME, SPARKS OR HOT SURFACES KEEP CONTAINERS TIGHTLY CLOSED.
In case Material is Released or Spilled:	ELIMINATE OPEN FLAMES OR IGNITION IN THE VICINITY OF VAPOR. STOP SOURCE OF LEAK. ABSORB LARGE SPILLS W/ABSORBENT CLAY OR OTHER SUITABLE MATERIALS.
Waste Disposal Methods:	PLACE CONTAMINATED MATERIALS IN DISPOSABLE CONTAINERS INCINERATE OBSERVING LOCAL, STATE, & FEDERAL HEALTH, SAFETY & POLLUTION LAWS. PREVENT RUNOFFS FROM ENTERING DRAINS, SEWERS, OR STREAMS.

===== SECTION 8 – SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection: WEAR APPROVED NIOSH RESPIRATORY PROTECTIVE EQUIPMENT IN AREAS OF INSUFFICIENT VENTILATION.

Ventilation: USE ADEQUATE VENTILATION TO KEEP AIRBORNE CONCENTRATION BELOW EXPOSURE STANDARDS.

Protective Gloves: USE NITRILE OR NEOPRENE GLOVES TO AVOID SKIN CONTACT USE CHEMICAL SAFETY GOGGLES. LAUNDRER CONTAMINATED CLOTHING BEFORE USE.

**Eye Protection:
Practices:** USE CHEMICAL SAFETY GOGGLES.

Other protective Clothing or Equipment: APRONS, EYEWASH FOUNTAINS & SAFETY SHOWERS ARE RECOMMENDED.

Work / Hygienic Practices: AFTER USE, WASH HANDS W/SOAP & WATER BEFORE EATING, DRINKING OR SMOKING. LAUNDRER CONTAMINATED CLOTHING BEFORE USE.

===== SECTION 10 – DISCLAIMER

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