

# SAFETY DATA SHEET

## SECTION 1 - MANUFACTURER'S IDENTIFICATION

Product Name: INDURETHANE ACTIVATOR Product Code: Q8-1212

Trade Name: POLYMERIC HMDI

Manufacturer's Name: Induron Protective Coatings, LLC

Address: 3333 Richard Arrington Blvd. N.  
Birmingham, Alabama 35234

Emergency Phone: 1-800-424-9300

Information Phone: (205)324-9584

## Section 2 - Hazards Identification

### GHS Ratings:

Flammable liquid	3	Flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ (140°F)
Inhalation Toxicity	Acute Tox. 4	Gases $>2500$ + $\leq 5000$ ppm, Vapors $>10$ + $\leq 20$ mg/l, Dusts & mists $>1$ + $\leq 5$ mg/l
Skin sensitizer	1	Skin sensitizer
Organ toxin single exposure	3	Transient target organ effects- Narcotic effects- Respiratory tract irritation

### GHS Hazards

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction
H332	Harmful if inhaled
H335	May cause respiratory irritation

### GHS Precautions

P210	Keep away from heat/sparks/open flames/hot surfaces - No smoking.
P233	Keep container tightly closed.
P241	Use explosion-proof electrical equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required
P285	In case of inadequate ventilation wear respiratory protection
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P363	Wash contaminated clothing before reuse
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P308+P313	IF exposed or concerned: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P370+P378	In case of fire: Use CO <sub>2</sub> , water spray, foam, or dry chemical to extinguish.
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container in accordance to appropriate regulations and laws.

Signal Word: Warning



### Section 3 - Composition / Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Hexamethylene diisocyanate homopolymer	28182-81-2	90.00%
1-Butylacetate	123-86-4	4.00%
Aromatic naphtha, type I	64742-95-6	2.00%
Xylol	1330-20-7	1.00%
Trimethylbenzene, 1,3,5-	108-67-8	1.00%
Hexamethylene-1,6-diisocyanate	822-06-0	1.00%
Benzene, 1,2,4-trimethyl-	95-63-6	1.00%

### Section 4 - First Aid Measures

**INHALATION** - If product solids are inhaled either as dust or in the form of a spray mist, remove the person from exposure immediately. If breathing is difficult, irregular, or has stopped, start resuscitation; call a physician. Administer oxygen if a qualified operator is available.

**EYE CONTACT** - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. Have a physician examine the eyes.

**SKIN CONTACT** - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water.

**INGESTION** - If material is ingested, seek immediate medical attention. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs.

Notes to Physician: No data found

### Section 5 - Fire Fighting Measures

Flash Point: 47 C (117 F)

LEL: 1.0%

UEL: 8.0%

Flamable Product

**EXTINGUISHING MEDIA:** Use carbon dioxide (CO<sub>2</sub>), "alcohol" foam, dry chemical systems. Direct water application may cause violent frothing.

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** Moisture can cause significant pressure increases in the packaging, leading to pressure caused leaks or even explosions.

**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon, hydrocarbons, hydrogen cyanide, oxides of sulfur and or zinc.

**FIRE FIGHTING:** If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure. Use water spray to cool unopened containers.

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### Section 6 - Accidental Release Measures

**SPILL AND LEAK PROCEDURES:** Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

**SMALL SPILLS:** Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbant materials with water to prevent spontaneous combustion with alkyd type formulas.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

**LARGE SPILLS:** Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas .

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbant with water for alkyd type spills.

### Section 7 - Handling and Storage

**HANDLING PRECAUTIONS:** Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 40 to 95 F (4 to 35 C).

**STORAGE:** Prevent from freezing. Do not store above 120 F (49 C). Keep in dry areas.

Store only in original containers.

**REGULATORY REQUIREMENTS:** No data found.

### Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Hexamethylene diisocyanate homopolymer 28182-81-2	Not Established	Not Established	Not Established
1-Butylacetate 123-86-4	150 ppm TWA; 710 mg/m3 TWA	200 ppm STEL 150 ppm TWA	NIOSH: 150 ppm TWA; 710 mg/m3 TWA 200 ppm STEL; 950 mg/m3 STEL
Aromatic naphtha, type I 64742-95-6	Not Established	Not Established	Not Established
XyloI 1330-20-7	100 ppm TWA; 435 mg/m3 TWA	150 ppm STEL 100 ppm TWA	Not Established
Trimethylbenzene, 1,3,5- 108-67-8	Not Established	Not Established	NIOSH: 25 ppm TWA; 125 mg/m3 TWA
Hexamethylene-1,6- diisocyanate 822-06-0	Not Established	0.005 ppm TWA	NIOSH: 0.005 ppm TWA; 0.035 mg/m3 TWA 0.020 ppm Ceiling (10 min); 0.140 mg/m3 Ceiling (10 min)

Benzene, 1,2,4-trimethyl- 95-63-6	Not Established	Not Established	NIOSH: 25 ppm TWA; 125 mg/m3 TWA
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**ENGINEERING:** Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

**VENTILATION:** Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits.

**ADMINISTRATIVE CONTROLS:** No data found.

**PROTECTIVE EQUIPMENT:** Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

Wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear.

Wear chemical vapor mask or air supplied mask during exposure of vapors.

**CONTAMINATED EQUIPMENT:** Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

### Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

<p style="text-align: center;"><b>Evaporation rate:</b> NA</p> <p style="text-align: center;"><b>Autoignition temperature:</b> NA</p> <p style="text-align: center;"><b>Coating VOC Lb/Gal</b> 0.47</p> <p style="text-align: center;"><b>Appearance:</b> Taupe</p> <p style="text-align: center;"><b>VAPOR PRESURE</b> NA</p> <p style="text-align: center;"><b>Vapor Density:</b> NA</p> <p style="text-align: center;"><b>DENSITY</b> 9.43</p> <p style="text-align: center;"><b>Freezing point:</b> NA</p> <p style="text-align: center;"><b>Boiling range:</b> 137C</p> <p style="text-align: center;"><b>Flammability:</b> NA</p>	<p style="text-align: center;"><b>Partition coefficient (n- NA octanol/water):</b></p> <p style="text-align: center;"><b>Decomposition temperature:</b> NA</p> <p style="text-align: center;"><b>Viscosity:</b> NA</p> <p style="text-align: center;"><b>Odor:</b> E</p> <p style="text-align: center;"><b>Odor threshold:</b> NO DATA</p> <p style="text-align: center;"><b>pH:</b> NA</p> <p style="text-align: center;"><b>Melting point:</b> NA</p> <p style="text-align: center;"><b>Solubility:</b> NA</p> <p style="text-align: center;"><b>Flash point:</b> 117°F,47°C</p> <p style="text-align: center;"><b>Explosive Limits:</b> NA</p>
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### Section 10 - Stability and Reactivity

Stability: The product is stable under normal storage conditions

STABLE

The product is unstable in the presence of water, and active hydrogen containing compounds such as amines, alcohols, and acids.

This mixture is likely to exhibit the following combustion products: Carbon oxides, hydrogen cyanide, aliphatic compounds, and oxides of sulfur and zinc.

Hazardous polymerization will not occur.

### Section 11 - Toxicological Information

**Mixture Toxicity**

Oral Toxicity LD50: 84mg/kg

Inhalation Toxicity LC50: 5mg/L

Routes of Entry: Skin, Eyes, Breathing

Exposure to this material may affect the following organs: Skin, lungs, eyes, internal organs .  
Blood Eyes Central Nervous System Skin Respiratory System

#### Effects of Overexposure

**Carcinogenicity:** The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing) .

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
64742-95-6	Aromatic naphtha, type I	2.00	Aromatic naphtha, type I: EU REACH: Present (P)

Preexisting skin, eye, and respiratory disorders may be aggravated by exposure to this product. Impaired kidney and liver functions from preexisting disorders may be aggravated by exposure to this product.

Kidney damage may be evidenced by changes in urine output, urine appearance, or edema (swelling from fluid retention). Liver damage may be evidenced by loss of appetite, jaundice and sometimes pain in the upper abdomen on the right side.

### Section 12 - Ecological Information

#### Component Ecotoxicity

1-Butylacetate	96 Hr LC50 Lepomis macrochirus: 100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 17 - 19 mg/L [flow-through] 72 Hr EC50 Desmodemus subspicatus: 674.7 mg/L
Aromatic naphtha, type I	96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L 48 Hr EC50 Daphnia magna: 6.14 mg/L
Xylol	96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 - 40.75 mg/L [static] 48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L
Trimethylbenzene, 1,3,5-	96 Hr LC50 Pimephales promelas: 3.48 mg/L
Hexamethylene-1,6-diisocyanate	96 Hr LC50 Brachydanio rerio: 26.1 mg/L [static]
Benzene, 1,2,4-trimethyl-	96 Hr LC50 Pimephales promelas: 7.19 - 8.28 mg/L [flow-through] 48 Hr EC50 Daphnia magna: 6.14 mg/L

### Section 13 - Disposal Considerations

As the US EPA, state, regional, and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the hazardous waste generator, to learn of and satisfy all the requirements which affect you. Dispose of the hazardous waste at a properly licensed and permitted disposal site or facility. Ensure conformity to all applicable hazardous waste disposal regulations.

The US EPA Hazardous Waste Numbers which follow are applicable to this unadulterated product if the product enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies solid wastes which are subject to regulation under various sections of the Code and which are

