

Material Safety Data Sheet

Revised 5/02

Section I

Manufacturer's Name Coatings For Industry, Inc.	Emergency Telephone # 1-800-535-5053
Address 319 Township Line Road Souderton, PA 18964	Non-Emergency Telephone # 215-723-0919
Chemical Name & Synonyms Two Component Polyurethane Coating	Trade Name and Synonyms Urethabond 111 Part A Clear OR Pigmented

Section II - Hazardous Ingredients

	% U111 Clear	% U111 Pigmented	TLV	CAS#
Solvents				
Propylene Glycol Monomethyl Ether Acetate (PMA)	15.9	13.1	OSHA - Not Established ACGIH-Not Established	108-65-6
Exposure limits of 100 ppm TWA (150 ppm stel) are recommended based on similarity to propylene glycol monomethyl ether.				
Ethyl 3-Ethoxypro- pionate (EEP)	45.3	12.5	OSHA - Not Established ACGIH-Not Established	763-69-9
An exposure limit has not been established. Recommended exposure limit is 50 ppm as an 8 hour TWA and 100 ppm as a 15 minute stel.				
Aromatics 100		6.2	OSHA: 150 ppm TWA 200 ppm stel ACGIH: 150 ppm TWA 200 ppm stel	64742-95-6
Xylene	2.3	2.0	OSHA: 100 ppm TWA 150 ppm STEL ACGIH: 100 ppm TWA 150 ppm STEL	1330-20-7

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not "hazardous" per this OSHA standard may be listed.

Section III - Physical Data

Specific Gravity ~~~~~U111 Clear ~~~~~ 1.04
 ~~~~~U111 Pigmented (Dependent upon color)~ 1.1 to 1.5  
 % Volatile by Volume ~~~~~Approximately 51 to 74.  
 Vapor Pressure ~~~~~ PMA : 3.7 mm Hg. @ 20° C.  
                               EEP : 1.1 mm Hg. @ 25° C.  
                               Aromatics 100 : Less than 10 mm Hg. @ 25° C.  
                               Xylene : 9 mm Hg. @ 20° C.

Water Solubility ~~~~~ None  
 Appearance & Odor ~~~~~ Clear or color of pigment/solvent odor

### Section IV - Fire and Explosion Data

Flash Point ~~~~~108° F. TCC.  
 Flammable Limits                   LEL (%)   UEL (%)  
 PMA @ 173° F.                   1.3       13.1  
 EEP @ 190° F.                   1.05      Not Determined  
 Aromatics @ 283° F.           1.0       7.0  
 Xylene                            1.0       7.0

Extinguishing Media:                   Dry chemical; carbon dioxide; foam; water

Special Fire Fighting Procedures:

Full emergency equipment with self contained breathing apparatus and full protective clothing should be worn by fire fighters. During a fire, irritating and/or toxic gases and smoke (see reactivity data) may be present from decomposition/combustion. Isolate from heat, electrical equipment, sparks and open flame. Closed container may explode when exposed to extreme heat. Use cold water to cool fire exposed containers to minimize risk of rupture. Solvent vapors may be heavier than air. Stagnant air may cause vapors to accumulate and travel along the ground to an ignition source which may result in a flash back to the source of the vapors.

### Section V - Human Health Data

Route of Entry : Inhalation; skin contact; eye contact.

Human Effects and Symptoms of Overexposure:

#### **Acute Inhalation**

Solvent vapors are irritating to the eyes, nose, throat and respiratory tract resulting in red, itchy eyes, dryness of the throat and tightness in the chest. Other possible symptoms of overexposure include headache, nausea, narcosis, fatigue and loss of appetite.

#### **Chronic Inhalation:**

Chronic exposure to organic solvents has been associated with various neurotoxic effects including permanent brain and nervous system damage. Symptoms include: loss of memory, loss of intellectual ability and loss of coordination.

#### **Acute Skin Contact:**

Repeated or prolonged skin contact with solvents can result in dry, defatted and cracked skin causing increased susceptibility to infection. In addition, skin irritation (i.e. redness, swelling),

**Acute Skin Contact (cont.)**

which may develop into dermatitis, may occur from skin contact. Solvents can penetrate the skin and may cause systemic effects similar to those identified under acute inhalation symptoms.

**Chronic Skin Contact:**

Chronic skin exposure to solvents may cause effects similar to those identified under chronic inhalation effects.

**Acute Eye Contact:**

Liquid, aerosols and vapors of this product are irritating and can cause tearing, reddening and swelling of the eye. If left untreated, corneal damage can occur and injury is slow to heal. However, damage is usually reversible. See Section VI for treatment.

**Chronic Eye Contact:**

Prolonged vapor contact may cause conjunctivitis.

**Acute Ingestion:**

Can result in irritation and possible corrosive action in the mouth, stomach tissue, and digestive tract. Vomiting may cause aspiration of the solvent resulting in chemical pneumonitis.

**Chronic Ingestion:**

None found

**Carcinogenicity**

NTP ~~~~~ Not Listed

IARC ~~~~~ Not Listed

OSHA ~~~~~ Not Regulated

Medical conditions aggravated by exposure:  
None Known

**Exposure Limits:**

Not established for product as a whole. Refer to Section II for exposure limits of hazardous constituents.

**Section VI - Emergency and First Aid Procedures**

**First Aid for Eyes:**

Flush with clean, lukewarm water (low pressure) for at least 15 minutes, while lifting eyelids. Obtain medical attention if irritation persists.

**First Aid for Skin:**

Remove contaminated clothing immediately. Wash affected areas thoroughly with soap and water. Wash contaminated clothing thoroughly before reuse.

**First Aid for Inhalation:**

Move to an area free from risk of further exposure. Administer oxygen or artificial respiration as needed. Obtain medical attention.

**First Aid for Ingestion:**

Do not induce vomiting. Do not give anything by mouth to an unconscious person. Consult physician.

**Section VII - Employee Protection Recommendations**

**Eye Protection Requirements:**

Safety glasses, splash goggles or face shield. Contact lenses should not be worn.

**Skin Protection Requirements:**

Chemical resistant gloves. Cover as much of the exposed skin area as possible with appropriate clothing.

**Respirator/Ventilation Requirements:**

Exhaust ventilation sufficient to keep the airborne concentrations of the solvents in the workplace below their respective TLVs.

Respirator that is recommended or approved for use in organic vapor containing environments (air purifying or fresh air supplied) may be necessary. In spray applications an organic vapor/particulate respirator or air supplied air unit is necessary. The use of a positive pressure supplied air respirator is mandatory when; airborne concentrations are not known; when levels are 10 times the appropriate TLV; or if spraying is performed in a confined space or area with limited ventilation. Take into account other materials being used concurrently, the type of application and environmental concentrations when selecting a respirator. Observe OSHA regulations for respirator use (29 CFR 1910.134).

**Additional Protective Measures:**

Safety showers and eyewash stations should be available. Educate and train employees in safe use of product. Follow all label instructions.

**Section VIII - Reactivity Data**

Stability ~~~~~ Stable under normal conditions.

Hazardous polymerization ~~~~~ Will not occur.

Incompatibilities ~~~~~ Strong Oxidizers.

This product contains trimethylol propane and should not be combined with phosphorus containing materials because highly toxic fumes can be emitted in a fire situation.

Instability Conditions ~~~~~ None Known.

Decomposition Products:

By Fire: CO, CO<sub>2</sub>.

**Section IX - Spill and Leak Procedures**

**Spill or Leak Procedures:**

Evacuate nonessential personnel. Remove all sources of ignition and ventilate the area.

Equip clean up crew with appropriate protective equipment (see employee protection recommendations). Soak up in absorbent material such as sand, vermiculite, fuller's earth and collect material in suitable containers.

**Waste Disposal Method:**

Waste may be incinerated or disposed of in accordance with federal, state, and local environmental control regulations. Empty containers must be handled with care due to product residue and combustible solvent vapor. Do not heat or cut empty container with electric or gas torch. (see Sections IV and VIII).

**Section X - Special Precautions and Storage Data**

Storage Temperature (min/max) ~~~~~ 32° F. (0 C)/122° F. (50 C)

Shelf Life ~~~~~ Two years, if unopened.

**Special sensitivity:**

Material is hygroscopic and may absorb small amount of atmospheric moisture. Containers should be tightly closed to prevent contamination with foreign materials and moisture.

**Handling/storage precautions:**

Material is combustible - keep away from heat, sparks and open flame. Take precautions against the buildup of electrostatic charges. Store in tightly closed containers to prevent moisture contamination. Practice caution and good personal cleanliness to avoid contact with skin and eyes. Avoid breathing vapors.

Note: Two component system- the cautions and hazards of both components apply to combined product when mixed.

**Section XI - Shipping Information**

D.O.T. Shipping Name ~~~~~Paint  
 D.O.T. Hazard Class ~~~~~ 3  
 UN/NA Number ~~~~~UN1263  
 Packaging Group ~~~~~III

D.O.T. Label ~~~~~Combustible \*  
 D.O.T. Placard ~~~~~ Combustible \*

\*If quantity is in a non bulk packaging (less than 119 gallons), this material ships as non regulated unless the combustible liquid is a hazardous substance or a hazardous waste.

IMO/IMDG  
 ICAO/IATA  
 Hazard Label ~~~~~Flammable Liquid  
 Hazard Placard ~~~~~Flammable Liquid

**Section XII - Federal Regulatory Information**

OSHA status: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA status: on TSCA inventory

SARA Title III:

Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazard Categories: Immediate Health Hazard  
 Delayed Health Hazard  
 Fire Hazard

Section 313 Toxic Chemicals: Aromatics 100 (CAS # 64742-95-6)  
 Xylene (CAS # 1330-20-7)

RCRA Status When discarded in its purchased form, this  
 and Product meets the criteria of ignitability,  
 Should be managed as a hazardous waste  
 (EPA Hazardous Waste Number D001). (40  
 CFR 261.20-24)

MA = Massachusetts Hazardous Substance List  
 NJ2 = New Jersey Environmental Hazardous Substance List  
 NJ3 = New Jersey Special Health Hazardous Substance List

NJ4 = New Jersey Other – included in 5 predominant ingredients > 1%  
NJTSRN = New Jersey Trade Secret Registry Number  
PA1 = Pennsylvania Hazardous Substance List  
PA3 = Pennsylvania Non-hazardous present at 3% or greater.

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CERCLA Reportable Quantity

Xylene – 100 Lbs.

California Proposition 65

To the best of our knowledge, this product contains no levels of listed substances, which the state of California has found to cause cancer, birth defects or other reproductive effects.

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Notice: This information is presented in good faith and believed to be accurate as of the effective date below. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Coatings For Industry, Inc. assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by the material, such vendees or users assume all risks associated with the use of the material. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state and local laws. The preceding specific information is made for the purpose of complying with numerous federal, state and local laws and regulations.

7/96