MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: D.O.I. Wet Look Hardener
Product Numbers: 102310 and 102312
Product Use: Acrylic Enamel Hardener

Company
ITW Evercoat
a Division of Illinois Tool Works Inc.
6600 Cornell Road
Cincinnati, Ohio USA
Phone: 513-489-7600

Emergency Telephone Numbers:
CHEMTREC: 1-800-424-9300
CANUTEC: 1-613-996-6666

Prepared By: Safety Department

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	EINECS Number	% (by weight)
Non-Hazardous Ingredients	Proprietary	Proprietary	50 – 55
n-Butyl Acetate	123-86-4	204-658-1	10 – 15
Heptyl Acetate	90438-79-2	N/L	5 – 10
1,2,4 Trimethylbenzene	95-63-6	202-436-9	1 – 5
Xylene	1330-20-7	215-535-7	0 – 2
Ethyl Benzene	100-41-4	202-849-4	0 – 2
1, 6 Hexamethylene Diisocyanate	822-06-0	212-485-8	0 – 2
Isophorone Diisocyanate	4098-71-9	223-861-6	0 – 2

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

SECTION 3. HAZARDS IDENTIFICATION

*****EMERGENCY OVERVIEW*****

DANGER! VAPOR AND SPRAY MIST HARMFUL. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION. COMBUSTIBLE. OVEREXPOSURE MAY CAUSE LUNG DAMAGE. MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION, EFFECTS MAY BE PERMANENT. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. INDIVIDUALS WITH LUNG OR BREATHING PROBLEMS OR PRIOR REACTION TO ISOCYANATES MUST NOT BE EXPOSED TO VAPOR OR SPRAY MIST.

Potential Health Effects

Acute Effects (Short Term):

Eye: Contact with liquid or vapor may result in severe irritation, redness, tearing, and blurred vision.

Skin: May cause skin irritation. Prolonged or repeated contact may dry the skin. May cause allergic skin reaction, effects may be permanent. Symptoms may include redness, burning, drying and cracking of skin, and skin burns.

Swallowing: Ingestion of this material may cause gastrointestinal irritation, nausea, diarrhea, and vomiting. Aspiration of this material into the lungs due to vomiting may produce chemical pneumonitis which can be fatal.

Inhalation: Excessive inhalation of vapors may cause nasal and respiratory irritation, acute nervous system depression, fatigue, weakness, nausea, headache, and dizziness. May cause allergic respiratory reaction, effects may be permanent. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

Chronic Effects of Overexposure (Long Term):

Isocyanates: This substance may cause effects on the lungs, resulting in impaired functions. Repeated or prolonged contact may cause skin and respiratory sensitization. Repeated or prolonged inhalation exposure may cause asthma. The symptoms of asthma often do not become manifest until a few hours have passed and they are aggravated by physical effort. Anyone who has shown symptoms of asthma due to this substance should avoid all further contact with this substance.

1,2,4 Trimethylbenzene: Long term exposure to this substance may cause nervousness, tension and bronchitis.

Xylene: The substance may have effects on the central nervous system, resulting in decreased learning ability.

Cancer Information: The IARC has classified ethyl benzene as a group 2B carcinogen (possibly carcinogenic to humans) based on the increase of kidney tumors in rats and an increase in lung and liver cancer in mice. This material may contain trace amounts of chemicals considered to be carcinogenic by OSHA (Benzene, IARC-Group 1)

Other Health Effects: NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Primary Route(s) of Entry: Inhalation, Skin contact, Eye contact, Ingestion,

Skin absorption.

SECTION 4. FIRST AID MEASURES

Eyes: Flush eyes gently with water for at least 15 minutes. Seek immediate medical attention.

Skin: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing: Consult a physician or poison control center immediately. DO NOT INDUCE VOMITING. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. If possible, do not leave individual unattended.

Inhalation: If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, oxygen may be benificial if administered by trained personnel.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point: 111.2 ºF (44 ºC)
Explosive Limit: **Lower:** 0.9% **Upper:** 7.6%
OSHA Flammability Class: Combustible Liquid – Class II

Hazardous Products of Combustion: May form toxic and corrosive gases: carbon dioxide, carbon monoxide, nitrogen oxides, hydrogen cyanide and various hydrocarbons.

Fire and Explosion Hazards: Polymerization of material may occur under fire conditions. Polymerization of material in a closed container can create pressure build-up, which may cause rupture of container. This material is water reactive. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point.

Extinguishing Media: Regular foam, carbon dioxide, dry chemical.

Fire Fighting Instructions: Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus NIOSH approved with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.

NFPA Rating: Health - 3, Flammability -1, Reactivity - 1

SECTION 6. ACCIDENTAL RELEASE MEASURES

In Case of Spill: Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Ventilate the area. Wear proper protective equipment (Section 8). Avoid breathing vapors. Collect with an inert absorbant and dispose of properly.

SECTION 7. HANDLING AND STORAGE

Handling: All hazard precautions given in the data sheet must be observed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use only with adequate ventilation. Do not breathe vapors or spray mist. Do not take internally. Close container after each use. **Keep out of reach of children.**

Storage: Store material in a cool, well-ventilated area. This product may polymerize under the influence of temperatures above 199°F (93°C). For maximum product quality, avoid prolonged storage at temperatures above 75°F (25°C). Do not use or store near heat, sparks, or open flame. Keep container tightly closed. Avoid contact with incompatible materials.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Chemical splash goggles in compliance with OSHA regulations are recommended.

Skin Protection: Protective gloves and proper clothing should be worn to prevent skin contact. Gloves should be made of neoprene or natural rubber. To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory Protection: Use a NIOSH approved respirator designed to remove particulate matter and organic solvent vapors.

Engineering Controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below acceptable limits. Explosion-proof ventilation system is acceptable.

Exposure Guidelines:

Hazardous Ingredients	CAS Number	OSHA PEL/TWA	ACGIH TLV
1,2,4 Trimethylbenzene	95-63-6	N/E	25 ppm
1,6 Hexamethylene Diisocyanate	822-06-0	N/E	0.005 ppm
Ethyl Benzene	100-41-4	100 ppm	100 ppm
Isophorone Diisocyanate	4098-71-9	N/E	0.005 ppm
n-Butyl Acetate	123-86-4	150 ppm	150 ppm
Xylene	1330-20-7	100 ppm	100 ppm

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	336 - 350 °F/ 168 -177 °C	**Vapor Density:**	Heavier than air.
Specific Gravity / Density:	1.05 / 8.71 lbs/gal	**Percent Volatiles by volume:**	70 - 75 %
Evaporation Rate:	Slower than ethyl ether.	**Physical State:**	Liquid
Melting Point:	-13 °F / -25 °C (xylene)	**pH:**	Neutral
Odor:	Sharp, aromatic odor.	**Solubility:**	Insoluble in water.
Vapor Pressure:	8 mmHg @ 68 °F/20 °C (n-Butyl Acetate)	**Appearance:**	Clear Liquid
Octanol/Water Partition	Unknown	**VOC (material):**	2.57 lbs/gal

SECTION 10. STABILITY AND REACTIVITY

Hazardous Polymerization: Product may undergo hazardous polymerization if exposed to extreme heat.

Hazardous Decomposition: May form toxic and corrosive gases: carbon dioxide, carbon monoxide, nitrogen oxides, hydrogen cyanide and various hydrocarbons.

Chemical Stability: Stable under normal handling conditions. Reacts readily with water to form insoluble polyureas.

Incompatibility: Avoid contact in uncontrolled conditions with: water, strong acids, strong oxidizing agents, alcohols, amines and strong bases.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity Data:

Ingredient	CAS #	LD_{50} Oral-Rat	LC_{50} Inhalation-Rat
1,2,4 Trimethylbenzene	95-63-6	N/E	18,000 mg/m^3/4H
1,6 Hexamethylene Diisocyanate	822-06-0	738 mg/kg	N/E
Ethyl Benzene	100-41-4	3,500 mg/kg	N/E
n-Butyl Acetate	123-86-4	13,100 mg/kg	2,000 ppm/4H
Xylene	1330-20-7	4,300 mg/kg	5,000 ppm/4H

N/E-Not Established

Carcinogenicity: See Cancer Information, Section 3.
Mutagenicity: No significant evidence found.
Teratogenicity: No significant evidence found.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: This product should not be released to sewage, draining systems or any body of water exceeding concentrations of approved limits under applicable regulations and permits.

SECTION 13. DISPOSAL CONSIDERATION

RCRA Hazardous Waste: This material as supplied, if discarded, would be regulated as a hazardous waste under RCRA (40 CFR 261). Dispose of in accordance with applicable federal, state, and local regulations.

RCRA Hazard Class: This material would be regulated as EPA Hazardous Waste Number D001 based on the characteristic of ignitablity and D003 based on the characteristic of reactivity.

SECTION 14. TRANSPORT INFORMATION

DOT Description: The DOT Classification for shipping is dependant on quantity, type of packaging (a kit may include other components), or method of shipment.

SECTION 15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (USA) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a)

Component	RQ (lbs.)
n-Butyl Acetate	5000
Xylene	100
Ethyl Benzene	1000
1,6 Hexamethylene Diisocyanate	100

SARA Title III: Section 302- Extremely Hazardous Substances

Component	CAS Number	Percentage
Isophorone Diisocyanate	4098-71-9	0 – 2%

SARA Title III: Section 313- Toxic Chemical List

Component	CAS Number	Percentage
1,2,4 Trimethylbenzene	95-63-6	1 – 5%
Xylene	1330-20-7	5 – 10%
Ethyl Benzene	100-41-4	0 – 2%
1,6 Hexamethylene Diisocyanate	822-06-0	0 – 2%
Isophorone Diisocyanate	4098-71-9	0 – 2%

International Regulations

EINECS (Europe) The intentional ingredients of this product are listed.

DSL (Canada) The intentional ingredients of this product are listed.

WHMIS Classification

Health Hazard: D2A, D2B (Other Toxic Effects)

Physical Hazard: B2 (Flammable)

State and Local Regulations

California Proposition 65:

This product contains the following chemical(s) known to the state of California to cause cancer. BENZENE.

This product contains the following chemical(s) known to the state of California to cause birth defects or reproductive harm. TOLUENE, BENZENE

SECTION 16. OTHER INFORMATION

HMIS Rating: Health – 3*, Flammability - 2, Reactivity - 1
Key- 0=Least, 1=Slight, 2=Moderate, 3=Serious, 4=Extreme, *=Chronic Effects

Other Precautions for Use: This product must be mixed with other components prior to use. Please refer to the Material Safety Data Sheet for Clearcoat before using.

Additional Information may be obtained by calling the Evercoat MSDS Hotline at 1-800-729-7600.

NOTICE: The information accumulated herein is believed to be correct as of the date issued from sources, which are believed to be accurate and reliable. Since it is not possible to anticipate all circumstances of use, recipients are advised to confirm, in advance of need, that the information is current, applicable and suitable to their circumstances.