

# MATERIAL SAFETY DATA SHEET

Information Telephone #: (636) 296-2900

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ALL CHEMICAL EMERGENCIES  
1-800-255-3924

Issue Date: 10/01/2001

Product Code 109SG-8331

## SECTION I - PRODUCT IDENTIFICATION

**Product Code:** 109SG-8331  
**Trade Name:** Ultradec 8331 Semi-Gloss Urethane Glaze  
**Product Class:** Polyurethane Prepolymer Resin Solution  
**C.A.S. Number:** Mixture  
**HMIS Rating:** Health = 3 Fire = 3 Reactivity = 1

## SECTION II - INGREDIENTS

<u>Ingredients</u>	<u>CAS#</u>	<u>Maximum Content</u>	<u>Exposure Limits</u>
Urethane Prepolymer	Proprietary	35.0%	None Assigned
Satin Agent	Proprietary	3.0%	None Assigned
Xylene	1330-20-7	50.0%	100.00 ppm
Ethyl Benzene	100-41-4	12.0%	100.00 ppm
Toluene Diisocyanate	26471-62-5	1.0%	0.005 ppm

## SECTION III - PHYSICAL DATA

<b>Boiling Point:</b>	275° - 288° F	<b>Vapor Density:</b>	Heavier than Air
<b>Volatile %:</b>	66% by volume	<b>Specific Gravity:</b>	1.0
<b>Evaporation Rate:</b>	Slower than n-Butyl Acetate	<b>Appearance:</b>	Clear amber liquid with aromatic odor.

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**Flammability Class:** 1° C      **Flash Point:** 77° F      **LEL:** 0.9

◆ **EXTINGUISHING MEDIA:**

Water, carbon dioxide, or foam

◆ **SPECIAL FIREFIGHTING PROCEDURES:**

Firefighters should wear self-contained breathing apparatus to prevent inhalation of smoke or heated vapors.

◆ **UNUSUAL FIRE & EXPLOSION HAZARDS:**

This material may form toxic isocyanate vapors if heated.

## SECTION V - HEALTH HAZARD DATA

◆ **PERMISSIBLE EXPOSURE LEVEL:**

There is no OSHA PEL or ACGIH established for the urethane Polymer in this product.  
The OSHA PEL and ACGIH TLV for Xylene are currently set at 100 ppm for an 8-hour TWA.  
The STEL for Xylene is currently set at 150 ppm.

**SECTION V - HEALTH HAZARD DATA (cont.)**

The OSHA PEL and the ACGIH TLV for ethyl benzene is 100 ppm for an 8-hour TWA and 125 ppm for a 15-minute STEL.

The OSHA PEL and the ACGIH TLV for toluene diisocyanate are 0.005 ppm for an 8-hour TWA and 0.02 ppm as a 15-minute allowable Short Term Exposure Level (STEL).

**◆ EFFECTS OF OVEREXPOSURE:**

Inhalation - Vapors may cause irritation of the respiratory tract. Vapors emitted from high temperature processes may cause sensitization. Excessive exposure to vapors or spray mists can result in headache, dizziness, incoordination, nausea and loss of consciousness. Some reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Skin - Prolonged or repeated skin contact may cause irritation and dermatitis.

Eyes - Contact with eyes may cause burning and tearing. Laboratory animals exposed to high doses of xylene showed evidence of effects in the liver, kidney, lungs, spleen, heart, and adrenals. Rats exposed to xylene vapor during pregnancy showed embryo/fetotoxic effects.

**◆ FIRST AID:**

Inhalation - Remove victim to fresh air. If difficulty noted in breathing, get medical attention at once.

Skin - Wash affected areas with soap and water.

Eyes - Flush with water for fifteen minutes and get medical attention.

**◆ PRIMARY ROUTE (S) OF ENTRY:**

Inhalation and skin contact.

**◆ TOXICOLOGICAL INFORMATION:****XYLENE:**

LD50 (ORAL/RAT) 4300 MG/KG; LD50 (DRML/RABBIT) 2 ML/KG; LD50 (INHL/RAT) 5000 PPM/4H

**ETHYL BENZENE:**

LD50 (ORAL/RAT) 3500 MG/KG; LD50 (DRML/RABBIT) 17800 MG/KG

Toluene diisocyanate is listed as a suspect carcinogen by the NTP and IARC.

**TOLUENE DIISOCYANATE:**

LD50 (ORAL/RAT) 5800 MG/KG; LD50 (DRML/RABBIT) >16 G/KG; LD50 (INHL/RAT) 14 PPM/4H

**SECTION VI - REACTIVITY DATA**

**STABILITY:** ( ) Unstable (X) Stable

**HAZARDOUS POLYMERIZATION:** ( ) May Occur (X) Will not occur

**◆ INCOMPATIBILITY:**

Water, amines, strong bases, alcohols

**◆ CONDITIONS TO AVOID:**

Warm storage.

**◆ HAZARDOUS DECOMPOSITION PRODUCTS:**

At elevated temperatures, isocyanate vapors may be formed. Under severe thermal degradation, carbon monoxide and low molecular weight organic compounds may be formed.

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**SECTION VII - SPILL OR LEAK PROCEDURES**

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**◆ STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Ventilate area. Absorb spill with suitable absorbent material and place in a closed container. For large spills, dike area and pump into closed containers. Prevent this material from entering waterways. Wear protective equipment during cleanup. This material contains the following ingredients which, if spilled or released in quantities equal to or greater than the Reportable Quantity (RQ), are subject to the reporting requirements of CERCLA and/or SARA (40 CFR Parts 302 & 355):

Xylene	RQ Value = 1000 lbs.
Ethyl Benzene	RQ Value = 1000 lbs.
Toluene Diisocyanate	RQ Value = 100 lbs.

**◆ WASTE DISPOSAL METHOD:**

This material has been tested and found to have a flash point below 140 degrees Fahrenheit. If discarded, this material and containers should be treated as hazardous waste based on the characteristic of ignitability as defined under federal RCRA regulations (40 CFR 261). Disposal of this material or its containers requires compliance with applicable labeling, packaging, and record keeping standards. Extreme care should be taken to ensure that it is disposed of only in a facility permitted for disposal of hazardous waste.

For further information, contact your state or local waste agency or the United States Environmental Protection Agency's RCRA hotline (1-800-424-9346 or 202-382-3000).

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**SECTION VIII - SPECIAL PROTECTION INFORMATION**

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**◆ RESPIRATORY PROTECTION:**

Respiratory protection is required if material is used in poorly ventilated areas or if material is sprayed or heated.

**◆ VENTILATION:**

General ventilation is recommended.

Local ventilation is required if material is sprayed or heated.

**◆ PROTECTIVE GLOVES:**

Chemical-resistant gloves should be worn to prevent prolonged or repeated skin contact.

**◆ EYE PROTECTION:**

Chemical goggles should be worn to prevent eye contact with spills, splashes or vapors.

**◆ OTHER PROTECTIVE EQUIPMENT:**

Eye wash fountain and safety shower should be available.

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**SECTION IX - SPECIAL PRECAUTIONS**

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**◆ PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:**

Avoid inhalation of heated vapors or spray mists. Avoid prolonged or repeated skin contact.

**◆ OTHER PRECAUTIONS:**

None Known

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**SECTION X - SUPPLEMENTAL INFORMATION**

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**◆ REGULATORY INFORMATION:**

Toluene diisocyanate is listed by the state of California as a substance known to cause cancer. The California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) requires that clear and reasonable warning be given before exposing any individual to toluene diisocyanate.

**◆ SARA & WHIMS HAZARD CLASSIFICATIONS:**

This material has been categorized as having the following hazard(s) as defined by SARA Title III regulations (40 CFR 370); acute, chronic, fire, reactive.

CANADIAN WHIMS CLASSIFICATION: 82,D2A, D2B

**◆ SARA SECTION 313 LISTED INGREDIENTS:**

The following ingredients in this material are subject to the reporting requirements of section 313 of SARA and 40 CFR 372 [see Section II for percentage of ingredient(s)]:

Xylene	(1330-20-7)
Ethyl benzene	(100-41-4)
2,4-Toluene Diisocyanate	(26471-62-5)

**◆ DOT PROPER SHIPPING NAME:**

RESIN SOLUTION, 3, UN1866, III  
FLAMMABLE LIQUID

**◆ MSDS PREPARATION INFORMATION:**

**PREPARED BY:** Product Safety & Compliance Department  
#12 Tenbrook Industrial Park  
Arnold, Missouri 63010  
(636) 296-2900

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