

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Name: Erathane 300 Finish Coat White
Product Number: drums, pails
Chemical Name: Polyurethane
Chemical Family: Polyurethane
CAS Number: Mixture

Company Identification

ER Systems
6900 Bleck Drive
Rockford, MN 55373
1-800-403-7747 (For product information)
1-800-535-5053 Infotrac (For emergencies)

SPECIAL NOTES:

Single component moisture cure polyurethane topcoat.

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT LISTING:

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>
Confidential Ingredient A	36.0 - 41.0 %	Trade Secret
MEDIUM ALIPHATIC SOLVENT NAPHTHA (PETROL	18.0 - 22.0 %	64742-88-7
4,4'-DIPHENYLMETHANE ISOCYANATE	< 0.1 %	101-68-8
CALCUIM CARBONATE	15.0 - 205 %	1317-65-3
MAGNESIUM SILICATE TALC	7.0 - 12.0 %	14807-96-6

(See Section 8 for exposure guidelines)

(See Section 15 for regulatory information)

HAZARDS DISCLOSURE

This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.



(section 2 continued)

As defined under Sara 311 and 312, this product contains materials that are chronic hazards.

3. HAZARDS IDENTIFICATION

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*****      EMERGENCY OVERVIEW      *****
*
*                               CAUTION                               *
*
* May cause irritation to respiratory system. May                   *
* cause nausea, headaches, and dizziness. May cause                 *
* drowsiness, weakness, and fatigue. May cause                     *
* allergic respiratory sensitization. May cause                     *
* skin, eye, or respiratory tract irritation.                       *
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HMIS Rating - Health: 2*
 Flammability: 2
 Reactivity: 1

NFPA/HMIS Definitions: (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

POTENTIAL HEALTH EFFECTS

EYE:

Contact may cause eye irritation. May result in corneal opacity (clouding of the eye surface).

SKIN:

Causes skin irritation, and possible allergic reaction. In those who have developed skin sensitization, these symptoms can develop as a result of contact with a very small amount of the liquid material.

INHALATION:

Avoid breathing vapors or mists. Prolonged or excessive inhalation may cause respiratory tract irritation. May cause, nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. May cause allergic respiratory sensitization.



(section 3 continued)

INGESTION:

Harmful if swallowed. Irritating to mouth, throat, and stomach.

CHRONIC EFFECTS:

Overexposure may cause dermatitis, asthma, skin and respiratory sensitization and decreased lung function. Prolonged or repeated contact/exposure to aromatic petroleum distillates may cause defatting, drying and irritation of the skin, dermatitis, and central nervous system (CNS) effects. Fillers are encapsulated and not expected to be released from product under normal conditions of use. This product contains a small amount of diisocyanate. Prolonged and repeated exposure to isocyanate can lead to skin sensitization. For persons so sensitized even brief exposures to the isocyanate can produce reddening, swelling, rash, or blisters. Similarly, prolonged and repeated exposure to isocyanates can lead to respiratory sensitization. In such individuals brief exposures to isocyanates at levels well below the TLV can produce chemical asthma, and nonspecific asthmatic conditions.

REPRODUCTIVE HAZARDS:

No birth defects or teratogenic effects were reported in a teratology study with rats exposed to 1,4, and 12 mg/m³ polymeric MDI for 6 hr/day in days 6-15 of gestation.

CARCINOGENICITY INFORMATION:

Results from a lifetime inhalation study in rats indicate that MDI aerosol was carcinogenic at 6 mg/m³, the highest dose tested. This is well above the recommended TLV of 5 ppb (0.05 mg/m³). Only irritation was noted at the lower concentration of 0.2 and 1 mg/m³.

TARGET ORGAN:

Skin, Eyes, Ingestion, Lungs.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Individuals who are sensitized to isocyanates and those with preexisting lung disease or conditions, including non-specific bronchial hyperreactivity or asthma, must avoid all exposure to isocyanates.

4. FIRST AID MEASURES

EYE CONTACT FIRST AID:

After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get immediate medical attention.



(section 4 continued)

SKIN CONTACT FIRST AID:

Remove contaminated clothing and shoes. Wash affected area immediately with large amounts of soap and water. Get medical attention if irritation persists.

INHALATION FIRST AID:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

INGESTION FIRST AID:

If swallowed do not induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Should vomiting occur, be sure to keep victim's head below hips to avoid aspiration of vomitus into lungs. Call a physician or poison control center immediately.

NOTES TO PHYSICIAN:

There is no antidote to counteract the effects of isocyanates. Care should be supportive and treatment should be based on the judgment of the physician in response to the action of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

TCC Flash Point: 41.1 C (106.0 F)
Autoignition Temperature: N/A

FLAMMABLE LIMITS IN AIR

LEL: 0.9 %
UEL: 9.5 %

FLAMMABLE PROPERTIES:

Full emergency equipment with self contained breathing apparatus and full protective clothing should be worn. At temperatures greater than 400 F material may polymerize causing pressure build up in closed containers. Explosive rupture is possible. Use cold water to cool containers exposed to fire.

EXTINGUISHING MEDIA:

Water fog, carbon dioxide, foam or dry powder.



(section 5 continued)

FIRE & EXPLOSION HAZARDS:

Material will burn in a fire.

FIRE FIGHTING INSTRUCTIONS:

As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH (approved or equivalent) and full protective gear.

COMBUSTION PRODUCTS:

Smoke may contain the original materials in addition to unidentified toxic and or irritating compounds. Hazardous combustion products may include but are not limited to: nitrogen oxides, isocyanate, hydrogen cyanide, carbon monoxide, and carbon dioxide.

MISCELLANEOUS:

Reacts with water to form carbon dioxide gas, which may create excessive pressure in containers. Reacts exothermically with polyol and alcohols. Reacts exothermically and possibly violently with acids, amines and alkaline solutions.

6. ACCIDENTAL RELEASE MEASURES

SAFEGUARDS (PERSONNEL):

Evacuate non-emergency personnel to a safe area. Avoid breathing vapor. Ventilate spill area. Wear safety goggles. Wear appropriate personal protective equipment.

INITIAL CONTAINMENT:

Contain spilled material. Absorb spills with inert material. Place in closed containers but do not seal.

LARGE SPILLS PROCEDURE:

Absorb spill with inert material (e g, dry sand or earth), then place in a chemical waste container. Place in closed containers but do not seal. Neutralize spill with mixture of 90% water, 3-8% ammonia and 2-7% detergent. Add at a 10 to 1 ratio and let stand for 48 hrs allowing CO2 to escape.

7. HANDLING AND STORAGE

RECOMMENDED STORAGE TEMPERATURE

Minimum: 15.6 C (60.1 F)
Maximum: 26.7 C (80.1 F)



(section 7 continued)

SHELF LIFE: (in original, sealed containers)

8 months @ 26.7 C

HANDLING (PERSONNEL):

Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash hands thoroughly after handling. Do not reuse this container.

HANDLING (PHYSICAL ASPECTS):

Provide appropriate ventilation. Close container after each use. Keep container closed to avoid contamination. Keep out of reach of children.

STORAGE PRECAUTIONS:

Avoid extreme temperatures. Keep container closed when not in use. Store in a cool dry place.

SPECIAL SENSITIVITY:

All handling equipment should be electrically grounded.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

EYE / FACE PROTECTION REQUIREMENTS:

Wear safety glasses. A respiratory protection program that meets OSHA's 29 CFR 1910-134 and ANSI Z88-2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION REQUIREMENTS:

Selection of specific items such as gloves, boots, apron or full-body suit will depend on operation.

RESPIRATORY PROTECTION REQUIREMENTS:

When there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

EXPOSURE GUIDELINES:

No Information Available.



(section 8 continued)

MISCELLANEOUS:

OSHA PEL: 200 ppm for medium aliphatic solvent naphtha.

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Liquid
COLOR: White
ODOR: Aromatic
BOILING POINT: 320 F @ 5 mm Hg
VAPOR DENSITY: >1 (Air = 1)
SOLUBILITY IN WATER: Slight
SPECIFIC GRAVITY: 1.2 (Water = 1)
VISCOSITY: 4,000 to 6,000 cps
EVAPORATION RATE: slower than ether
VOLATILE ORGANIC COMPOUNDS (VOC) ...: 2.04 lb/gallon

MISCELLANEOUS:

Water reactivity.

10. STABILITY AND REACTIVITY

STABILITY:

Stable under normal storage, handling and use..

POLYMERIZATION:

May occur.

INCOMPATIBILITY WITH OTHER MATERIALS:

Avoid contact with amines, water or moisture and oxidizing agents.
Alcohols, strong acids, and strong bases.

DECOMPOSITION:

Decomposition will not occur if handled and stored properly.

CONDITIONS TO AVOID:

Moisture may produce CO2.

11. TOXICOLOGICAL INFORMATION

No information available.



12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

14. TRANSPORTATION INFORMATION

PRODUCT LABEL: Erathane 300 Finish Coat White
D.O.T. HAZARD CLASS ...: Combustible Liquid
UN NUMBER: UN 1993, PG III

15. REGULATORY INFORMATION

Title V

4,4'-DIPHENYLMETHANE ISOCYANATE (101-68-8)

SC Toxic Air Pollutants List

4,4'-DIPHENYLMETHANE ISOCYANATE (101-68-8)

MISCELLANEOUS INFORMATION:

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA).

16. OTHER INFORMATION

PREPARED BY: Chemist
APPROVED BY: Laura Vollenweider
TITLE: Chemist
APPROVAL DATE: July 7, 2008
SUPERCEDES DATE ...: New
RTN NUMBER: 00000155 (Official Copy)

ADDITIONAL INFORMATION:

The data in this Material Safety Data Sheet relates only to the specific material designated herein.



To the best of our knowledge, the information contained in this MSDS is accurate. It is intended to assist the user in his evaluation of the product's hazards, and safety precautions to be taken in its use. The data in this MSDS relate only to the specific material designated herein. We do not assume liability for the use of, or reliance on this information, nor do we guarantee its accuracy or completeness.

END OF MSDS

