

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Name: Erakote
Product Number: drums, pails
Chemical Name: Polyurethane
Chemical Family: Polyurethane
CAS Number: Mixture

Company Identification

ERSystems- Elastomeric Roofing Systems, Inc.
6900 Bleck Dr
Rockford, MN 55373 USA
1-800-403-7747 (For product information)
1-800-535-5053 Infotrac (For emergencies)

SPECIAL NOTES:

Single component moisture cure aliphatic polyurethane finish coat.

2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0% Erakote

CONTAINING:

HAZARDOUS AND/OR REGULATED COMPONENTS

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>
4,4'-DIISOCYANATODICYCLOHEXYLMETHANE	< 1.0 %	5124-30-1

NON-HAZARDOUS COMPONENTS

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>
MEDIUM ALIPHATIC SOLVENT NAPHTHA (PETROL	< 20.0 %	64742-88-7

(See Section 8 for exposure guidelines)

(See Section 15 for regulatory information)

HAZARDS DISCLOSURE



(section 2 continued)

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

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

3. HAZARDS IDENTIFICATION

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***** EMERGENCY OVERVIEW *****
*
* CAUTION
*
* Prolonged or repeated contact may cause skin or eye
* irritation. May be harmful if swallowed. Long
* term exposure to isocyanates has been reported to
* cause lung damage, including reduced lung function
* which may be permanent.
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HMIS Rating - Health: 2
               Flammability: 1
               Reactivity: 1
               Personal Protection Index: S

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POTENTIAL HEALTH EFFECTS

EYE:

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

SKIN:

Causes skin burns, 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 allergic respiratory reaction.

INGESTION:

Harmful if swallowed. Can burn mouth, throat, and stomach.



(section 3 continued)

CHRONIC EFFECTS:

Sensitized (allergic) individuals may show allergenic lung and/or skin reaction. Increased sensativity may persist for weeks and in some extreme cases, years. Any individual diagnosed as sensative to isocyanates must avoid all exposure.

MEDICAL CONDITIONS AGRAVATED BY EXPOSURE:

Individuals who are sensitized to isocyanates and those with preexisting lung disease or conditions, including non-specific bronchial hpyperreactivity 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.

SKIN CONTACT FIRST AID:

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

INHALATION FIRST AID:

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

INGESTION FIRST AID:

If swallowed, immediately give 2 glasses of water. Do not induce vomiting. Contact a physician. Never give anything by mouth to an unconscious person. Get immediate medical attention.

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



(section 5 continued)

FLAMMABLE LIMITS IN AIR

LEL: 1 %

UEL: 6 %

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, carbon dioxide, foam or dry powder.

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.

MISCELLANEOUS:

Reacts with water to form carbon dioxide gas, wich 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.



(section 6 continued)

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)

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.



(section 8 continued)

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:

MEDIUM ALIPHATIC SOLVENT NAPHTHA (PETROL
OSHA PEL: 200 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Liquid
COLOR: White
ODOR: Aromatic
BOILING POINT: 320 F @ 5 mm Hg
SOLUBILITY IN WATER: N/A
SPECIFIC GRAVITY: 1.1 (Water = 1)
VISCOSITY: 3,000 to 5,000 cps
EVAPORATION RATE: slower than ether
VOLATILE ORGANIC COMPOUNDS (VOC) ...: 2.47 lb/gallon

MISCELLANEOUS:

Water reactivity.

10. STABILITY AND REACTIVITY

STABILITY:

Stable.

POLYMERIZATION:

May occur.

INCOMPATIBILITY WITH OTHER MATERIALS:

Incompatible or can react with acids, bases, oxidizers.



(section 10 continued)

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: Erakote
D.O.T. HAZARD CLASS ...: Combustible Liquid
UN NUMBER: N.A. 1993, III

15. REGULATORY INFORMATION

Canadian Disclosure List

4,4'-DIISOCYANATODICYCLOHEXYLMETHANE (5124-30-1)



16. OTHER INFORMATION

PREPARED BY: N/A
APPROVED BY: Laura Vollenweider
TITLE: Chemist
APPROVAL DATE: October 25, 2002
SUPERCEDES DATE ...: New
MSDS NUMBER: uret00era
RTN NUMBER: 00000014 (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

