

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Name: HER
Product Number: sausages, pails, gallon cans
Chemical Name: Polyurethane
CAS Number: Blend

Company Identification

ERSystems
6900 Bleck Drive
Rockford, MN 55373
1-800403-7747 (For product information)
1-800-535-5053 Infotrac (For emergencies)

SPECIAL NOTES:

Aluminum pigmented, single component moisture cure polyurethane seam sealer designed for metal roof applications.

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT LISTING:

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>
AROMATIC HYDROCARBON	< 13.5 %	6472-95-6
4,4' - DIPHENYLMETHANE DIISOCYANATE	< 0.2 %	101-68-8
1,3-BUTANEDIOL, POLYMER WITH 1,1'-METHYLENEBIS[IS	< 0.1 %	150449-03-9
ALUMINUM	< 2.0 %	7429-90-5
TALC	< 9.0 %	14807-96-6
CALCIUM OXIDE	< 3.0 %	1305-78-8
1,2,4-TRIMETHYLBENZENE	< 10.0 %	95-63-6
XYLENE	< 1.0 %	1330-20-7
CUMENE	< 0.5 %	98-82-8

(See Section 8 for exposure guidelines)

(See Section 15 for regulatory information)

COMPOSITION COMMENT:

CAS# 64742-95-6 Aromatic Hydrocarbon is composed of,.

CAS# 95-63-6 1,2,4-trimethylbenzene 32.0% max.



(section 2 continued)

CAS# 1330-20-7 Xylene 3.0% max.

CAS# 98-82-8 Cumene 1.5% max.

HAZARDS DISCLOSURE

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 acute, chronic, fire 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. Keep
* away from heat, sparks, flame.
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*****
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HMIS Rating - Health: *2
Flammability: 2
Reactivity: 0

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.

SKIN:

Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis). May cause allergic skin reaction.



(section 3 continued)

INHALATION:

Avoid breathing vapors or mists. Prolonged or excessive inhalation may cause respiratory tract irritation. May cause allergic respiratory reaction. High vapor concentrations are irritating to the eyes, nose, throat, and lungs. May cause headaches and dizziness, anaesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

INGESTION:

Harmful if swallowed. Can burn mouth, throat, and stomach. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death. Minimal toxicity.

CHRONIC EFFECTS:

Sensitized (allergic) individuals may show allergenic lung and/or skin reaction. After an individual is diagnosed as sensitive to isocyanates, no exposure should be permitted. Chronic effects of overexposure to xylene may include kidney or liver damage.

REPRODUCTIVE HAZARDS:

Exposure to aromatic hydrocarbon may damage developing fetus.

CARCINOGENICITY INFORMATION:

No known cancer hazards.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Asthma-like conditions may cause additional breathing problems.

4. FIRST AID MEASURES

EYE CONTACT FIRST AID:

After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation develops or persists.

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 develops or persists.

INHALATION FIRST AID:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if cough or other symptoms develop.



(section 4 continued)

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.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

TCC Flash Point: 43.3 C (109.9 F)
Autoignition Temperature: N/A

FLAMMABLE LIMITS IN AIR

LEL: 0.9 %
UEL: 6.5 %

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, carbon dioxide, foam or dry powder.

FIRE & EXPLOSION HAZARDS:

Vapors may flow along surfaces to distant ignition sources and flash back. Closed containers exposed to heat may explode. Contact with strong oxidizers may cause 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:

Carbon Monoxide, Carbon Dioxide, Nitrous Gases.

6. ACCIDENTAL RELEASE MEASURES

SAFEGUARDS (PERSONNEL):

Wear safety goggles. Wear appropriate personal protective equipment. Eliminate all sources of ignition - heat, sparks, flame, electricity, impact and friction. Provide appropriate ventilation, or respirator to keep exposure below the Permissible Exposure Levels.



(section 6 continued)

INITIAL CONTAINMENT:

Contain spilled material. Absorb spills with inert material. Eliminate all sources of ignition - heat, sparks, flame, electricity, and impact.

LARGE SPILLS PROCEDURE:

Absorb spill with inert material (e g, dry sand or earth), then place in a chemical waste container.

SMALL SPILLS PROCEDURE:

Absorb spills with inert material.

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)

6 months @ 26.7 C

HANDLING (PERSONNEL):

Avoid prolonged or repeated contact with skin. Wash hands thoroughly after handling.

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

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. Wash hands thoroughly after handling.



(section 8 continued)

RESPIRATORY PROTECTION REQUIREMENTS:

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

EXPOSURE GUIDELINES:

TALC

OSHA TWA: 0.3 mg/m³
ACGIH TWA: 2.0 mg/m³

CALCIUM OXIDE

OSHA PEL: 5 mg/m³
OSHA TWA: 5 mg/m³

1,2,4-TRIMETHYLBENZENE

OSHA TWA: 25 ppm, 125 mg/m³
ACGIH TWA: 25 ppm, 123 mg/m³

XYLENE

OSHA PEL: 100 ppm, 435 mg/m³
ACGIH TWA: 100 ppm, 434 mg/m³
OSHA STEL: 150 ppm, 655 mg/m³
ACGIH STEL: 150 ppm, 651 mg/m³

CUMENE

OSHA PEL: 50 ppm, 245 mg/m³
ACGIH TWA: 50 ppm, 246 mg/m³

1,2,4-TRIMETHYLBENZENE

OSHA TWA: 25 ppm, 125 mg/m³
ACGIH TWA: 25 ppm, 123 mg/m³

XYLENE

OSHA PEL: 100 ppm, 435 mg/m³
ACGIH TWA: 100 ppm, 434 mg/m³
OSHA STEL: 150 ppm, 655 mg/m³
ACGIH STEL: 150 ppm, 651 mg/m³

Cumene

OSHA PEL: 50 ppm, 245 mg/m³
ACGIH TWA: 50 ppm, 246 mg/m³

MISCELLANEOUS:

Diphenylmethane-4,4' diisocyanate OSHA CLV 0.02 ppm, 0.2 mg/m³ ACGIH TWA value 0.005 ppm.

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Liquid
COLOR: Aluminum
ODOR: Strong, Solvent Odor
BOILING POINT: 320 F
SPECIFIC GRAVITY: 0.9 (Water = 1)
VISCOSITY: 120,000 - 140,000 cps
VOLATILE ORGANIC COMPOUNDS (VOC) ...: 2.04 lb/gallon



10. STABILITY AND REACTIVITY

STABILITY:

Stable; however, may decompose if heated.

POLYMERIZATION:

Polymerization may occur when product is in contact with moisture or other materials which react with isocyanates, or when heated.

INCOMPATIBILITY WITH OTHER MATERIALS:

Incompatible or can react with acids, bases, oxidizers.

DECOMPOSITION:

Decomposition will not occur if handled and stored properly.

11. TOXICOLOGICAL INFORMATION

MISCELLANEOUS:

Look at section 3 for available information on potential health effects.

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: HER
D.O.T. SHIPPING NAME ...: Combustible Liquid, N.O.S.
D.O.T. HAZARD CLASS: Combustible Liquid
UN NUMBER: 1268, PG III

MISCELLANEOUS:

If shipped by air needs to be classified to.

Petroleum istillates, N.O.S.

UN 1268 PG III.



15. REGULATORY INFORMATION

Canadian Disclosure List

4,4' - DIPHENYLMETHANE DIISOCYANATE (101-68-8)
ALUMINUM (7429-90-5)
CALCIUM OXIDE (1305-78-8)
1,2,4-TRIMETHYLBENZENE (95-63-6)

SARA Title III - Section 313

4,4' - DIPHENYLMETHANE DIISOCYANATE (101-68-8)
ALUMINUM (7429-90-5)
1,2,4-TRIMETHYLBENZENE (95-63-6)
1,2,4-TRIMETHYLBENZENE (95-63-6)
XYLENE (1330-20-7)
CUMENE (98-82-8)

CERCLA Hazardous Substances

4,4' - DIPHENYLMETHANE DIISOCYANATE (101-68-8) -- RQ 5000 lbs.
XYLENE (1330-20-7) -- RQ 1000 lb
CUMENE (98-82-8) -- RQ 5000 lb
XYLENE (1330-20-7) -- RQ 1000 lb
CUMENE (98-82-8) -- RQ 5000 lb

RCRA Hazardous Substances

XYLENE (1330-20-7) -- RCRA Code: U239
CUMENE (98-82-8) -- RCRA Code: U055

Title V

4,4' - DIPHENYLMETHANE DIISOCYANATE (101-68-8)
ALUMINUM (7429-90-5)
1,2,4-TRIMETHYLBENZENE (95-63-6)
XYLENE (1330-20-7)
CUMENE (98-82-8)

SC Toxic Air Pollutants List

4,4' - DIPHENYLMETHANE DIISOCYANATE (101-68-8)
XYLENE (1330-20-7)
CUMENE (98-82-8)

MISCELLANEOUS INFORMATION:

CERCLA RQ 5000 lbs. for CAS# 101-68-8 Diphenylmetane-4,4'- diisocyanate.

California Proposition 65 this product contains a chemical(s) known to the state of California to cause cancer and birth defects or other reproductive harm.



16. OTHER INFORMATION

PREPARED BY: Laura Vollenweider
APPROVED BY: Laura Vollenweider
TITLE: Chemist
APPROVAL DATE: February 16, 2010
SUPERCEDES DATE ...: New
RTN NUMBER: 00000185 (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

