

MATERIAL SAFETY DATA SHEET

Section 1. Identification of the Substance/Preparation and of the Company/Undertaking

PRODUCT NAME: Polyurethane Dispersion
PRODUCT NUMBER: R4115
PRODUCT USE: Polyurethane dispersion

COMPANY: Essential Industries, Inc.
P.O. Box 12
Merton, WI 53056-0012

EMERGENCY PHONE: 800-843-6174

PHONE NUMBER: 262-538-1122

ABBREVIATION KEY: N.A. - Not Applicable N.E. = Not Established N.D. = Not Determined

Section 2. Composition/Information on Ingredients

<u>HAZARDOUS CHEMICAL IDENTITY</u>	<u>%</u>	<u>CAS NO.</u>	<u>TLV-TWA (8 hours)</u>	<u>TLV-STEL (15 mins)</u>	<u>OSHA PEL</u>
Water	40-70	7732-18-5	N.E.	N.E.	N.D.
Triethylamine salt of polymers	30-60	Proprietary	N.E.	N.E.	N.D.
n-Methyl-2-pyrrolidone	9	872-50-4	N.E.	100ppm	N.D.

Section 3. Hazards Identification

ROUTES OF ENTRY: Ingestion. Inhalation. Skin contact. Eye contact.

POTENTIAL ACUTE HEALTH EFFECTS

Eyes: Direct contact may cause irritation.

Skin: Prolonged or repeated contact may cause irritation. May be absorbed through skin with prolonged or repeated contact.

Ingestion: May cause gastrointestinal irritation, nausea, diarrhea.

Inhalation: Prolonged exposure in poorly ventilated area may cause respiratory irritation.

H.M.I.S.

		<u>HAZARD RATING</u>
1	HEALTH	
0	FIRE	4 = Extreme
0	REACTIVITY	3 = High
B	MAXIMUM PERSONAL PROTECTION	2 = Moderate
		1 = Slight
		0 = Insignificant

Section 4. First Aid Measures

FIRST AID - NOTES TO PHYSICIAN

Eyes: Flush with a large amount of water for 15 minutes holding eyelids open.

Skin: Wash with mild soap and water.

Ingestion: Give 2-3 large glasses of water. Seek medical attention.

Inhalation: Remove to fresh air and rest.

Note to Physician: No additional information.

Section 5. Fire Fighting Measures

EXTINGUISHER MEDIA: Use dry chemical or CO2.

FLASH POINT: N.A.

SPECIAL FIRE FIGHTING PROCEDURES: None.

Autoignition Temperature: N.A.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

LEL: N.A. **UEL:** N.A.

Section 6. Environmental Precautions and Clean-up Methods

STEPS TO BE TAKEN IF MATERIALS IS SPILLED OR RELEASED:

Collect and reuse if possible. Flush to sewer with large quantities of water if permitted by regulatory authorities or absorb on inert material (sand, clay, etc.) and place into container for proper disposal. Do not allow runoff into public waterways.

Section 7. Handling and Storage

HANDLING REQUIREMENTS: After handling, always wash hands thoroughly with soap and water.

STORAGE REQUIREMENTS: Store in cool, dry area. Follow good housekeeping practices.

Section 8. Exposure Controls and Personal Protection

ENGINEERING CONTROLS Local Exhaust: Acceptable Mechanical: Recommended

PROTECTIVE CLOTHING **HYGIENIC MEASURES:** Do not eat, drink or smoke during use.

- Protective Gloves:** Rubber for prolonged exposure.
- Eye Protection:** Safety glasses if splashing is likely.
- Respiratory Protection:** None normally required with adequate ventilation.
- Protective Clothing and Equipment:** As needed to prevent wetting of skin.

9. Physical and Chemical Properties

COLOR: Colorless to light yellow.	BOILING POINT: 100°C (212°F)	VAPOR PRESSURE: <30 mm of Hg	VOC: 2.15 lbs./gallon
ODOR: Amine	FREEZING POINT: 0°C (32°F)	VAPOR DENSITY: <1	pH: 7.5 - 8.5
PHYSICAL STATE: Liquid	SPECIFIC GRAVITY: 1.05 gm/ml	EVAPORATION RATE: N.E.	SOLUBILITY: Complete

Section 10. Stability and Reactivity

CONDITIONS TO AVOID/INCOMPATIBILITY(MATERIALS TO AVOID): None known.
HAZARDOUS TERMAL DECOMPOSITION/COMBUSTION PRODUCTS: N.A.
STABILITY: Stable.
HAZARDOUS POLYMERIZATION: Will not occur.

Section 11. Toxicological Information

<u>Ingredient Name</u>	<u>LD50</u>	<u>LC50</u>
Water	N.D.	N.D.
Triethylamine salt of polymers	> 5000 mg/kg (est.)	N.D.
n-Methyl-2-pyrrolidone	4200mg/kg	N.D.

DEVELOPMENT TOXICOLOGICAL DATA

Carcinogenic Effects: None known. **Teratogenic Effects:** None known.
Mutagenic Effects: None known. **Reproductive Toxicity:** None known.

Section 12. Ecological Information

MOBILITY: Not available. **ACCUMULATION:** Not Available. **ECOTOXICITY:** Not available.
DEGRADABILITY: The biodegradability of this product as a whole has not been deteremined; however information on the biodegradability of the ingredients contained within this product can be obtain by contacting our Regulatory Department.

Section 13. Disposal Considerations

WASTE & HANDLING INFORMATION: Dispose of as permitted by all regulatory authorities.
Note: The waste generator must be informed of and follow all rules and regulations governing the handling and disposal of waste.

Section 14. Transport Information

TRANSPORTATION INFORMATION

DOT: Not Regulated.	IMDG: Not Regulated.	IATA: Not Regulated.
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Section 15. Regulatory Information

REGULATORY

This mixture contains 9% n-Methyl-2-pyrrolidone which is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR, Part 372.

Section 16. Other Information

Prepared By: Regulatory Affairs Department

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