

# MATERIAL SAFETY DATA SHEET

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

**PRODUCT NAME:** POLYURETHANE DISPERSION  
**PRODUCT NUMBER:** R4188  
**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.E.
Triethylamine salt of polymers	30-40	Proprietary	N.E.	N.E.	N.E.
n-Methyl-2-pyrrolidone	9	872-50-4	N.E.	100ppm	N.E.

## Section 3. Hazards Identification

**ROUTES OF ENTRY:** 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>
<b>1</b>	<b>HEALTH</b>	
<b>0</b>	<b>FIRE</b>	4 = Extreme
<b>0</b>	<b>REACTIVITY</b>	3 = High
<b>B</b>	<b>MAXIMUM PERSONAL PROTECTION</b>	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:** Flush skin with plenty of soap and water for at least 15 minutes while removing and isolating all contaminated clothing and shoes.

**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, CO<sub>2</sub>, water spray (fog) or foam.

**FLASH POINT:** None.

**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:** Chemical splash goggles.

**Respiratory Protection:** None normally required with adequate ventilation.

**Protective Clothing and Equipment:** As needed to prevent wetting of skin.

### 9. Physical and Chemical Properties

<b>COLOR:</b> Colorless to light yellow.	<b>BOILING POINT:</b> 100°C (212°F)	<b>VAPOR PRESSURE:</b> <30 mm of Hg	<b>VOC:</b> 1.68 lbs./gallon
<b>ODOR:</b> Amine	<b>FREEZING POINT:</b> 0°C (32°F)	<b>VAPOR DENSITY:</b> <1	<b>pH:</b> 7.5-8.5
<b>PHYSICAL STATE:</b> Liquid	<b>SPECIFIC GRAVITY:</b> 1.03 gm/ml	<b>EVAPORATION RATE:</b> N.E.	<b>SOLUBILITY:</b> Complete

### Section 10. Stability and Reactivity

**CONDITIONS TO AVOID/INCOMPATIBILITY(MATERIALS TO AVOID):** None known.

**HAZARDOUS TERMAL DECOMPOSITION/COMBUSTION PRODUCTS:** None known.

**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.E.
n-Methyl-2-pyrrolidone	4150 mg/kg (rat)	> 5 mg/l (rat)

#### 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 determined; 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.

**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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