



# MSDS

P.O. Box 329 - 802 Washington Avenue Chestertown, MD 21620 - USA

## MATERIAL SAFETY DATA SHEET

TELEPHONE # FOR INFORMATION 410 778-3100

24 HOUR EMERGENCY NUMBER (CHEM-TEL): USA, Canada, Puerto Rico 800-255-3924;

Outside North American Continent 813-248-0585 (call Collect)

### 1. Product Identification

**Product Code:** WL-4259

**Product Description:** Hardness 1 Reagent

**Manufactured By:** LaMotte Company

802 Washington Avenue

Chestertown, MD 21620

### 2. Composition/Information On Ingredients

Hazard	CAS#/Name	%	PEL	TLV
Yes	1310-73-2 Sodium Hydroxide	5.4	C 2 mg/m <sup>3</sup>	C 2 mg/m <sup>3</sup>
Yes	102-71-6 Triethanolamine; (Trolamine)	5.6	None Established	5 mg/m <sup>3</sup> (TWA)
Yes	7791-18-6 Magnesium Chloride	<0.1	None Established	None Established
No	7732-18-5 Water	to 100%	None Established	None Established

### 3. Hazards Overview

**Primary Route Of Entry:** Eye Skin Ingestion

Warning! Corrosive. Can cause severe irritation or burns to all body tissue. Harmful if swallowed.

#### HMIS Hazard

Scale: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Least

Health: 2      Flammability: 1      Reactivity: 1

**Carcinogenicity:** None:

#### **Other Health Related Comments:**

Trolamine is irritating to eyes, respiratory system and skin. Can cause allergic contact dermatitis, though not common. Sodium hydroxide has been investigated as a mutagen.

**4. First Aid Measures**

**Eye Contact:** Immediately flush with gentle stream of water, while lifting upper and lower eyelids, for 15 minutes. Contact

**Skin Contact:** Immediately flush with water for 15 minutes while remove affected clothing/shoes. Rinse skin thoroughly. Contact physician.

**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. Rinse out mouth and drink several glasses of water or milk. Contact physician.

**Inhalation:** If vapor or mist is inhaled, remove to fresh air. If breathing is difficult, give oxygen. Contact physician.

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**5. Fire Fighting Measures**

**Flash Point (Method Used):** 100% TROLAMINE limits **LEL:** 1.3% **UEL:** 8.5%

**Extinguishing Media:** Not a fire hazard

**Special Fire Fighting Procedures:** N/A

**Unusual Fire & Explosion Hazard:** N/A

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**6. Accidental Release Measures**

Ventilate area. Wear appropriate PPE (section 8). Containerize liquid where appropriate or absorb onto inert noncombustable material. Place in a chemical waste container and hold for disposal according to federal, state, and local regulations.

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**7. Handling & Storage**

Store tightly closed in a cool, dry, storage area away from sunlight and incompatible materials (such as strong acids or metals).

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## **8. Exposure Controls/Personal Protection**

### **Ventilation**

Normal Respiratory

### **Protection When Handling**

Eye Protection Gloves Lab Coat

**Work/Hygenic Practices:** Use in well-ventilated area. Avoid contact with eyes, skin, and clothing. Wash after handling.

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## **9. Physical & Chemical Properties**

**Appearance:** Clear colorless liquid

**Solubility In Water:** Soluble

**Odor:** None

**pH:** 13 - 14

**Vapor Density:** >1 (Air=1)

**Vapor Pressure:** <1 mm Hg @ 20°C

**Boiling Point:** Unknown

**Melting Point:** N/A

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## **10. Stability & Reactivity**

**Stable:** Yes

**Conditions To Avoid:** Heat, light

**Incompatibility (Materials To Avoid):** Strong acids, oxidizers, metal powders.

**Hazardous Decomposition Products:** CO<sub>x</sub>, NO<sub>x</sub>

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## **11. Toxicological Information**

Oral rat LD50: 4920mg/kg for Triethanolamine.

**Target Organs:** Corrosive to all body parts Eyes Respiratory System Skin

**Pre-Existing Conditions Aggravated By Exposure:** Trolamine: Asthma; NaOH: skin disorders

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## **12. Ecological Information**

Information Not Yet Available.

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## **13. Disposal Considerations**

Dispose of in accordance to federal, state and local regulations. If permitted, pour into large amount of water, neutralize, then flush down drain with excess water.

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## **14. Transportation Information**

### **Proper Shipping Name:**

**DOT:** SODIUM HYDROXIDE SOLUTION

**IATA:** SODIUM HYDROXIDE SOLUTION

### **Hazard Class/Div:**

**DOT:** 8

**IATA:** 8

**UN:** 1824

**Packing Group:** II

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## **15. Regulatory Information**

### **Chemical Inventory Status**

Hazard	Ingredient	USA	Europe	--- Canada ---		Australia	Japan
		TSCA	EC	DSL	NDSL		
Yes	1310-73-2 Sodium Hydroxide	Yes	Yes	Yes	No	Yes	Yes
Yes	102-71-6 Triethanolamine	Yes	Yes	Yes	No	Yes	Yes
Yes	7786-30-3 Magnesium Chloride, anhydrous	Yes	Yes	Yes	No	Yes	Yes
No	7732-18-5 Distilled Water	Yes	Yes	Yes	No	Yes	Yes

**Federal, State, & International Regulations**

<b>Ingredient</b>	<b>--- SARA 302 ---</b>		<b>----- SARA 313 -----</b>		<b>CERCLA</b>	<b>RCRA 261.33</b>	<b>TSCA 8(D)</b>
	<b>RQ</b>	<b>TPQ</b>	<b>Listed</b>	<b>Chemical Category</b>			
1310-73-2 Sodium Hydroxide	No	No	No	No	1000	No	No
102-71-6 Triethanolamine	No	No	No	No	No	No	No
7786-30-3 Magnesium Chloride, anhydrous	No	No	No	No	No	No	No
7732-18-5 Distilled Water	No	No	No	No	No	No	No

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--- SARA 311/312 ---

**Hazard Categories**

----- Australia -----

**Hazchem  
Code**

**Poison  
Schedule**

**This MSDS Is  
WHMIS Compliant**

**Ingredient**    **Acute**    **Chronic**    **Fire**    **Pressure**    **Reactivity**

1310-73-2    Yes    No    No    No    Yes  
Sodium Hydroxide

102-71-6    Yes    No    No    No    No    None Allocated    None Allocated  
Triethanolamine

7786-30-3    Yes    No    No    No    No    None Allocated    None Allocated  
Magnesium Chloride, anhydrous

7732-18-5    No    No    No    No    No    None Allocated    None Allocated  
Distilled Water

**product WL-4259 as a whole**    Yes    No    No    No    No    2R    S5    Yes

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**16. Other Information**

Keep out of reach of children.

**Prepared By:** Regulatory Affairs Department

**Revised:** 4/1/2009

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