



# 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:** 2218

**Product Description:** Wide Range Indicator

**Manufactured By:** LaMotte Company

802 Washington Avenue

Chestertown, MD 21620

### 2. Composition/Information On Ingredients

Hazard	CAS#/Name	%	PEL	TLV
Yes	64-17-5 Ethyl Alcohol	52	1900 mg/cubic m	1000 ppm
Yes	67-56-1 Methyl Alcohol	2	260 mg/cubic m	200 ppm
Yes	51-28-5 2,4 Dinitrophenol	0.05	N/E	N/E
Yes	1310-73-2 Sodium Hydroxide	0.5	C 2 mg/cubic m	C 2 mg/cubic m
Yes	77-09-8 Phenolphthalein	<0.1	N/E	N/E
Yes	76-59-5 Bromthymol Blue	<0.1	N/E	N/E
Yes	76-61-9 Thymol Blue	<0.1	N/E	N/E
Yes	493-52-7 Methyl Red	<0.1	N/E	N/E
No	7732-18-5 Water	to 100%		

### **3. Hazards Overview**

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

Poison! Danger! Flammable liquid & vapor! Harmful if swallowed, inhaled, or absorbed through skin. Ingestion may be fatal or cause blindness. Inhalation can cause headache, nausea. Affects central nervous system. May cause irritation to eyes and skin.

#### **HMIS Hazard**

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

**Health: 2      Flammability: 3      Reactivity: 1**

**Carcinogenicity:** Yes: NTP

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

Warning! This product contains phenolphthalein, a chemical known to the state of California to cause cancer. Phenolphthalein listed in NTP 9th Report on Carcinogens (2000) as "reasonably anticipated to be a human carcinogen".

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### **4. First Aid Measures**

**Eye Contact:** Flush thoroughly with water. Consult a physician.

**Skin Contact:** Wash with soap and water.

**Ingestion:** Give plenty of water. Call a physician immediately.

**Inhalation:** Remove to fresh air. Consult physician.

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### **5. Fire Fighting Measures**

**Flash Point (Method Used):** 22 deg C(closed cup)      **LEL:** 3.3%      **UEL:** 19%

**Extinguishing Media:** Dry chemical, CO2, or water spray

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

**Unusual Fire & Explosion Hazard:** Vapors may travel distance to ignition source and flash back.

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### **6. Accidental Release Measures**

Ventilate area. Eliminate all sources of ignition. Absorb on paper or spill pads. Allow to evaporate on iron pan (or other non-combustible container) in fume hood.

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## **7. Handling & Storage**

Store in cool, dry, storage area away from incompatible materials. Do not use near heat or flame. Keep out of reach of children.

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

### **Ventilation**

Mechanical

### **Protection When Handling**

Eye Protection Gloves Lab Coat

**Work/Hygenic Practices:** Use with adequate ventilation and avoid contact with skin. Wash after handling.

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

<b>Appearance:</b>	Dark Green Liquid	<b>Vapor Density:</b>	1.6 (Air=1)
<b>Solubility In Water:</b>	Soluble	<b>Vapor Pressure:</b>	ca. 40 mm Hg @ 20 deg
<b>Odor:</b>	Alcohol	<b>Boiling Point:</b>	<80 deg C
<b>pH:</b>	N/A	<b>Melting Point:</b>	N/A

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## **10. Stability & Reactivity**

<b>Stable:</b>	Yes
<b>Conditions To Avoid:</b>	Heat, sources of ignition
<b>Incompatibility (Materials To Avoid):</b>	Contact with nitric acid or other strong oxidizers
<b>Hazardous Decomposition Products:</b>	COx

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### **11. Toxicological Information**

Oral human LDLo: 1400 mg/kg, ethanol; 143 mg/kg, methanol; for 2,4-dinitrophenol: 36 mg/kg (toxic). Phenolphthalein investigated as a tumorigen, mutagen.

**Target Organs:** Central Nervous System Skin

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### **12. Ecological Information**

Information Not Yet Available

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### **13. Disposal Considerations**

Small quantity: Flush down drain with excess water. Large quantity: Atomize into an incinerator. Dispose according to federal, state and local regulations.

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### **14. Transportation Information**

**Proper Shipping Name:**

**DOT:** ETHANOL or ETHANOL SOLUTIONS

**IATA:** ETHANOL or ETHANOL SOLUTION

**Hazard Class/Div:**

**DOT:** 3

**IATA:** 3

**UN:** 1170

**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	64-17-5 Ethanol	Yes	Yes	Yes	No	Yes	Yes
Yes	67-56-1 Methyl Alcohol	Yes	Yes	Yes	No	Yes	Yes
Yes	51-28-5 2,4 Dinitrophenol	Yes	Yes	Yes	No	Yes	Yes
Yes	1310-73-2 Sodium Hydroxide	Yes	Yes	Yes	No	Yes	Yes
Yes	77-09-8 Phenolphthalein	Yes	Yes	Yes	No	Yes	Yes
Yes	76-59-5 Bromthymol Blue	Yes	Yes	Yes	No	Yes	No
Yes	76-61-9 Thymolsulfonphthalein	Yes	Yes	Yes	No	Yes	No
Yes	493-52-7 Methyl Red	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>			
64-17-5 Ethanol	No	No	No	No	No	No	No
67-56-1 Methyl Alcohol	No	No	Yes	No	5000	U154	No
51-28-5 2,4 Dinitrophenol	10	No	Yes	Yes	10	P048	Yes
1310-73-2 Sodium Hydroxide	No	No	No	No	1000	No	No
77-09-8 Phenolphthalein	No	No	No	No	No	No	No
76-59-5 Bromthymol Blue	No	No	No	No	No	No	No
76-61-9 Thymolsulfonphthalein	No	No	No	No	No	No	No
493-52-7 Methyl Red	No	No	No	No	No	No	No
7732-18-5 Distilled Water	No	No	No	No	No	No	No

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**Product Code:** 2218**Product Description:** Wide Range Indicator

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**--- SARA 311/312 ---****----- Australia -----****Hazard Categories****Hazchem  
Code****Poison  
Schedule****This MSDS Is  
WHMIS Compliant****Ingredient****Acute****Chronic****Fire****Pressure****Reactivity**64-17-5  
Ethanol

Yes

Yes

Yes No

No

None Allocated

None Allocated

67-56-1  
Methyl Alcohol

Yes

Yes

Yes No

No

2PE

S6

51-28-5  
2,4 Dinitrophenol

Yes

Yes

Yes No

Yes

no info'

no info'

1310-73-2  
Sodium Hydroxide

Yes

No

No No

Yes

2R

S6

77-09-8  
Phenolphthalein

Yes

Yes

No No

No

None Allocated

None Allocated

76-59-5  
Bromthymol Blue

Yes

No

No No

No

None Allocated

None Allocated

76-61-9  
Thymolsulphonphthalein

Yes

No

No No

No

None Allocated

None Allocated

493-52-7  
Methyl Red

No

No

No No

No

None Allocated

None Allocated

7732-18-5  
Distilled Water

No

No

No No

No

None Allocated

None Allocated

**product 2218  
as a whole**

Yes

Yes

Yes No

No

2[S]E

S5

Yes

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**16. Other Information**

Revised Section 14 to show alternative proper shipping names.

**Prepared By:** IP, Regulatory Affairs Department**Revised:** 9/9/2008

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