



# 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:** 4483

**Product Description:** Hardness Reagent #5

**Manufactured By:** LaMotte Company

802 Washington Avenue

Chestertown, MD 21620

### 2. Composition/Information On Ingredients

Hazard	CAS#/Name	%	PEL	TLV
Yes	1313-84-4 Sodium Sulfide, 9-Hydrate	1	10 ppm as H2S	C 20 ppm as H2S
Yes	1310-73-2 Sodium Hydroxide	0.7	C 2 mg/m <sup>3</sup>	C 2 mg/m <sup>3</sup>
Yes	1303-96-4 Sodium Borate, 10-Hydrate	4	5 mg/cubic m	5 mg/cubic m
Yes	6381-59-5 Potassium Sodium Tartrate, 4-hydrate	1	N/E	N/E
No	7732-18-5 Water	to 100%	None Established	None Established



## **7. Handling & Storage**

Protect from air and light. Store in cool, dry ventilated area away from heat and incompatibles (strong acids and oxidizers). Contact of sodium sulfide solutions with strong acids such as sulfuric or nitric acid can release toxic hydrogen sulfide gas.

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

### **Ventilation**

Mechanical

### **Protection When Handling**

Eye Protection Gloves Lab Coat

**Work/Hygenic Practices:** Avoid contact with skin & clothing. Use with adequate ventilation. Wash after handling.

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

**Appearance:** Clear Colorless Liquid

**Solubility In Water:** Soluble

**Odor:** Pungent Sulfide

**pH:** 12 - 13

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

**Vapor Pressure:** <17 mm Hg @ 20 deg C

**Boiling Point:** Unknown

**Melting Point:** N/A

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## **10. Stability & Reactivity**

**Stable:** Yes

**Conditions To Avoid:** Contact with acids liberates poisonous gas

**Incompatibility (Materials To Avoid):** Strong acids, strong oxidizers

**Hazardous Decomposition Products:** Hydrogen sulfide gas

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### **11. Toxicological Information**

For sodium sulfide--IPR Mouse LD50: 53 mg/kg; Oral rat LD50: 208 mg/kg. For Sodium borate Oral rat LD50: 2.66g/kg. Sodium hydroxide investigated as a mutagen.

**Target Organs:** Respiratory System Skin

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### **12. Ecological Information**

Information Not Yet Available

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### **13. Disposal Considerations**

For larger spill, treat collected waste as follows: In FUME HOOD, pour into water and carefully neutralize with 6M hydrochloric acid (H<sub>2</sub>S gas is toxic). Flush neutralized solution down drain with excess running water.

Dispose according to federal, state & local regs.

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### **14. Transportation Information**

**Proper Shipping Name:**

**DOT:** CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.  
(1% Sodium Sulfide)

**IATA:** CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.  
(1% Sodium Sulphide)

**Hazard Class/Div:**

**DOT:** 8

**IATA:** 8

**UN:** 3266

**Packing Group:** III

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**15. Regulatory Information**

**Chemical Inventory Status**

Hazard	Ingredient	USA	Europe	--- Canada ---		Australia	Japan
		TSCA	EC	DSL	NDSL		
Yes	1313-82-2 Sodium Sulfide, 9-hydrate	Yes	Yes	Yes	No	Yes	Yes
Yes	1310-73-2 Sodium Hydroxide	Yes	Yes	Yes	No	Yes	Yes
Yes	1330-43-4 Borates, Tetra, Sodium Salts (anhydrous)	Yes	Yes	Yes	No	Yes	Yes
Yes	304-59-6 Potassium Sodium Tartrate, anhydrous	Yes	Yes	Yes	No	Yes	Yes
No	7732-18-5 Distilled Water	Yes	Yes	Yes	No	Yes	Yes

**Federal, State, & International Regulations**

Ingredient	--- SARA 302 ---		----- SARA 313 -----		CERCLA	RCRA 261.33	TSCA 8(D)
	RQ	TPQ	Listed	Chemical Category			
1313-82-2 Sodium Sulfide, 9-hydrate	No	No	No	No	No	No	No
1310-73-2 Sodium Hydroxide	No	No	No	No	1000	No	No
1330-43-4 Borates, Tetra, Sodium Salts (anhydrous)	No	No	No	No	No	No	No
304-59-6 Potassium Sodium Tartrate, 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**

1313-82-2   Yes   No   No   No   No   2X   None Allocated  
Sodium Sulfide, 9-hydrate

1310-73-2   Yes   No   No   No   Yes   2R   S6  
Sodium Hydroxide

1330-43-4   Yes   Yes   No   No   No   None Allocated   S5  
Borates, Tetra, Sodium Salts (anhydrous)

304-59-6   Yes   No   No   No   No   None Allocated   None Allocated  
Potassium Sodium Tartrate, anhydrous

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

**product 4483**   Yes   No   No   No   No   None Allocated   None Allocated   Yes  
**as a whole**

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**16. Other Information**

NFPA rating for sodium sulfide, 9-hydrate (solid, crystals): 3-0-1  
Revisions made: Missing Transportation info' added to Section 14.

**Prepared By:** Regulatory Affairs Department

**Revised:** 10/16/2008

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