



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 H ₂ S	C 20 ppm as H ₂ S
Yes	1310-73-2 Sodium Hydroxide	0.7	C 2 mg/cubic m	C 2 mg/cubic m
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%		

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.

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.

9. Physical & Chemical Properties

Appearance:	Clear Colorless Liquid	Vapor Density:	<1(Air=1)
Solubility In Water:	Soluble	Vapor Pressure:	<17 mm Hg @ 20 deg C
Odor:	Pungent Sulfide	Boiling Point:	Unknown
pH:	12 - 13	Melting Point:	N/A

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

12. Ecological Information

Information Not Yet Available

13. Disposal Considerations

For larger spill, treat collected waste as follows: In FUME HOOD, pour into water and carefully neutralize with 6M hydrochloric acid (H₂S gas is toxic). Flush neutralized solution down drain with excess running water.

Dispose according to federal, state & local regs.

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

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 ---

----- Australia -----

Hazard Categories

**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

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: IP, Regulatory Affairs Department

Revised: 10/16/2008
