



PO Box 329 • 802 Washington Avenue • Chestertown, MD 21620 • USA
Telephone Number 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)

MSDS

Material Safety Data Sheet

1. Product Identification

Product Code:

7833

Product Description:

Tannin Reagent #1

Manufactured By:

LaMotte Company

802 Washington Avenue

Chestertown, MD 21620

2. Composition/Information on Ingredients

Hazardous	Name	CAS #	%	OSHA PEL	ACGIH TLV
Yes	Hydrochloric Acid	7647-01-0	3.7	C 7 mg/cubic m	C 5 mg/cubic m
Yes	Lithium Sulfate, hydrated	10102-25-7	17.5	N/E	N/E
Yes	Bromine Liquid	7726-95-6	<0.1	0.1 ppm	0.1 ppm
Yes	Sodium Tungstate, dihydrate	13472-45-2	10	N/E	N/E
Yes	Sodium Molybdate, dihydrate	7631-95-0	2.5	N/E	N/E
Yes	Phosphoric Acid	7664-38-2	<4	1 mg/cubic m	1 mg/cubic m
No	Water to 100%	7732-18-5	>62		

3. Hazards Overview

Primary Route of Entry: Ingestion Skin

Warning! Can cause burns to skin and eyes. Harmful if swallowed.

HMIS Hazard: (Scale: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Least)

Health: 2 Flammability: 0 Reactivity: 1

Carcinogenicity: None

Other Health Related Comments: See Section 11, Toxicity.

4. First Aid Measures

Eye Contact: Immediately flush with water for 15 minutes. Consult physician.

Skin Contact: Flush with water for 15 minutes while removing affected clothing. Wash skin with soap and water.

Ingestion: Rinse out mouth. Drink plenty of water. Call a doctor immediately.

Inhalation: Remove to fresh air.

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5. Fire Fighting Measures

Flash Point: N/A **LEL:** N/A **UEL:** N/A

Fire Rating

Extinguishing Media: Not a fire hazard

Special Fire Fighting Procedures: N/A

Hazardous Combustion and/or Decomposition Products: Hydrogen gas

Unusual Fire & Explosion Hazard: Can react with metals to produce flammable hydrogen gas.

6. Accidental Release Measures

Cover spill with sodium bicarbonate. Scoop up neutralized slurry and wash down drain with excess water.

7. Handling & Storage

Store in cool, dry, storage area away from incompatible materials.

8. Exposure Controls/Personal Protection

Ventilation

Use with adequate ventilation.

Protection When Handling

Gloves Eye Protection Lab Coat

Work/Hygienic Practices: Avoid contact with skin and clothing. Wash after handling.

9. Physical & Chemical Properties

Appearance:	Clear Yellow Liquid	Boiling Point:	Unknown
		Melting Point:	N/A
		pH:	<1
Odor:	None	Vapor Density:	Unknown
Solubility in Water:	Soluble	Vapor Pressure:	<17mm @ 20 deg C

10. Stability & Reactivity

Stable: Yes
Conditions to Avoid: heat, sunlight
Materials to Avoid: strong bases

Hazardous Decomposition Products: Hydrogen gas

11. Toxicological Information

Oral mouse LD50: 240 mg/kg for sodium tungstate; oral rat LD50: 613mg/kg for lithium sulfate, anhydrous; 1190 mg/kg for lithium sulfate, hydrate. Both lithium sulfate anhydrous and sodium tungstate investigated as possible mutagens.

Oral rat LD50: 2600 mg/kg for bromine liquid; Inhalation rat LC50: 2700 mg/m3

Target Organs: N/A

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12. Ecological InformationInformation not Available

13. Disposal ConsiderationsAdd slowly to a solution of soda ash and slaked lime. Pour this neutralized solution down drain with excess water. Dispose according to federal, state and local regulations.

14. Transport Information**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(Hydrochloric Acid, Phosphoric Acid Solution)**Hazard Class/Div:** 8
UN3264**Packing Group:** II

15. Regulatory Information**Chemical Inventory Status**

Ingredient	USA	Europe	---Canada---		Australia	Japan
	TSCA	EC	DSL	NDSL		
Hydrochloric Acid	Yes	Yes	Yes	No	Yes	Yes
Lithium Sulfate, anhydrous (10377-48-7)	Yes	Yes	Yes	No	Yes	Yes
Bromine Liquid	Yes	Yes	Yes	No	Yes	?
Sodium Tungstate, dihydrate	Yes	Yes	Yes	No	Yes	Yes
Sodium Molybdate, dihydrate	Yes	Yes	Yes	No	Yes	Yes
Phosphoric Acid	Yes	Yes	Yes	No	Yes	Yes
Water to 100%						

Federal, State, & International Regulations

Ingredient	---SARA 302---		----- SARA 313 -----			RCRA 261.33	TSCA 8(D)
	RQ	TPQ	Listed	Chemical Category	CERCLA		
Hydrochloric Acid	5000	500*	Yes	No	5000	No	No
Lithium Sulfate, anhydrous (10377-48-7)	No	No	No	No	No	No	No
Bromine Liquid	500	500	Yes	No	1	No	No
Sodium Tungstate, dihydrate	No	No	No	No	No	No	No
Sodium Molybdate, dihydrate	No	No	No	No	No	No	No
Phosphoric Acid	No	No	No	No	5000	No	No
Water to 100%							

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Ingredient	----- SARA 311/312 ----- Hazard Categories	----- Australia -----		This MSDS is WHMIS Compliant
		Hazchem Code	Poison Schedule	
Hydrochloric Acid	Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No (Mixture/Liquid)	2R	None allocated	
Lithium Sulfate, anhydrous (10377-48-7)	Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No (Pure/Solid)	None allocated	None allocated	
Bromine Liquid	Acute: Yes Chronic: Yes Fire: Yes Pressure: No Reactivity: Yes (Pure/Liquid)	S7	2XE	
Sodium Tungstate, dihydrate	Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No (Pure/Solid)	None allocated	None allocated	
Sodium Molybdate, dihydrate	Acute: Yes Chronic: No Fire: No Pressure: No Reactivity: No (Pure/Solid)	None allocated	None allocated	
Phosphoric Acid	Acute: Yes Chronic: No Fire: No Pressure: No Reactivity: No (Mixture/Liquid)	None allocated	None allocated	
For product #7833 liquid mixture, taken as a whole	Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No	2R	None allocated	

16. Other Information**Prepared By: IP****Revised: 7/26/2007**