

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name Manganese-Magnesium Test Solution #2

Other means of identification

Product Code(s) 5145

UN-No 1824

Recommended use of the chemical and restrictions on use

Recommended Use Use as a laboratory reagent. Industrial (not for food or food contact use). Laboratory chemicals.

Details of the supplier of the safety data sheet

Manufacturer Address

LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620 USA
T 410-778-3100
F 410-778-9748

Emergency telephone number

24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

EMERGENCY OVERVIEW

DANGER POISON

Hazard statements

Causes severe skin burns and eye damage.



Appearance Clear, colorless

Physical state liquid

Odor Odorless

Precautionary Statements - Prevention

Do not taste or swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

Immediately call a POISON CENTER or physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED, Rinse mouth, Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other Hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Sodium hydroxide	1310-73-2	15

4. FIRST AID MEASURES**First Aid Measures**

General advice	Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Call a physician immediately.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and isolate contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a physician immediately.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Drink plenty of water. Clean mouth with water. Call a physician immediately. Never give anything by mouth to an unconscious person.
<u>Self-protection of the first aider</u>	Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions Use personal protection recommended in Section 8. Avoid contact with skin, eyes or

clothing. Avoid breathing vapors or mists.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up Neutralize spills with acid such as acetic, hydrochloric or sulfuric, absorb with vermiculite or other inert substance, and package in a suitable container for disposal. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Do not taste or swallow. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Separate from acids. Keep out of the reach of children.

Incompatible Products Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and body protection Incidental contact/splash protection: Wear protective gloves/clothing. Repeated or prolonged contact: Chemical resistant protective sleeves.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor	Odorless
Appearance	Clear, colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	14	
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	1.0428 (5% Solution) 1.33 (30% Solution)	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Incompatible Products.
Incompatible materials	Acids.
Hazardous decomposition products	

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium hydroxide 1310-73-2	Not Established	= 1350 mg/kg (Rabbit)	Not Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Sodium hydroxide 1310-73-2	Not Established	Not Established	Not Established	Not Established

ATEmix (dermal) 9000

12. ECOLOGICAL INFORMATION

Ecotoxicity**Unknown Aquatic Toxicity** 85 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Sodium hydroxide 1310-73-2	Not Established	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	Not Established

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Sodium hydroxide 1310-73-2	Not Established

13. DISPOSAL CONSIDERATIONS**Disposal Methods** Dispose of waste product or used containers according to local regulations.**Contaminated packaging** Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Sodium hydroxide 1310-73-2	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sodium hydroxide 1310-73-2	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Sodium hydroxide 1310-73-2	-

14. TRANSPORT INFORMATION**DOT**

Proper shipping name SODIUM HYDROXIDE SOLUTION
UN-No 1824
Hazard Class 8
Packing group II
Reportable Quantity (RQ) 1000

IATA

Proper shipping name SODIUM HYDROXIDE SOLUTION
UN-No 1824
Hazard Class 8
Packing group II

IMDG/IMO

Proper shipping name SODIUM HYDROXIDE SOLUTION
UN-No 1824
Hazard Class 8
Packing group II

15. REGULATORY INFORMATION**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Sodium hydroxide 1310-73-2	Not Established

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide 1310-73-2	Not Established	Not Established	Not Established	Not Established

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Sodium hydroxide 1310-73-2	1000 lb	Not Established	RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations**California Proposition 65**

Chemical name	California Proposition 65
Sodium hydroxide 1310-73-2	Not Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium hydroxide 1310-73-2	X	X	X

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

Chemical name	CPSC (Consumer Product Safety Commission) - Specially Regulated Substances
Sodium hydroxide 1310-73-2	Banned, 16 CFR 1500.17 ($\geq 10\%$ by weight in liquid drain cleaners); Add POISON to label, 16 CFR 1500.129 ($\geq 10\%$, free or chemically unneutralized)
16. OTHER INFORMATION	

NFPA

Health hazard 3

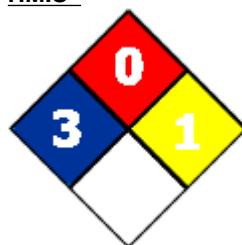
Flammability 0

Instability 0

Physical and Chemical Hazards N/A**HMIS**

Health hazard 3

Stability 2



Health Hazard	3
Fire Hazard	0
Reactivity	2

Prepared by

Issuing Date

Revision Date

Reason for revision

Disclaimer

Regulatory Affairs Department

Jul-25-2012

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Update to Format

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Material Safety Data Sheet