

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

Product identifier

Product name Manganese Periodate Reagent

Other means of identification

Product Code(s) 6311

UN-No 1479

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

Physical hazards Oxidizing Solids.

EMERGENCY OVERVIEW

DANGER

Hazard statements

Harmful if swallowed. Harmful in contact with skin.
May intensify fire; oxidizer.



Appearance White

Physical state crystalline powder

Odor Slight

Precautionary Statements - Prevention

Keep out of the reach of children. Keep/Store away from combustible materials. Wear protective gloves/protective clothing/eye protection/face protection. Wash face, hands and any exposed skin thoroughly after handling.

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents/containers in accordance with local regulations.

Unknown Acute Toxicity

3.1% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Sodium metaperiodate	7790-28-5	1-5
Sodium sulfate	7757-82-6	to 100%

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

Do not breathe dust. Do not get in eyes, on skin, or on clothing. Show this safety data sheet to the doctor in attendance.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Consult a physician if necessary.

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Ingestion

DO NOT induce vomiting unless directed to do so by a physician or poison control center. Drink plenty of water. Consult a physician if necessary.

Self-protection of the first aider

Use personal protective equipment. See section 8 for more information. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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

Water spray, dry chemical, carbon dioxide (CO₂), or foam.

Specific hazards arising from the chemical

This is a strong oxidizer and will react vigorously or explosively with many materials including fuels.

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 See section 8. Ensure adequate ventilation. Wear protective gloves/clothing and eye/face protection.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Sweep up in a manner that does not disperse dust and shovel into suitable containers for disposal.

Methods for cleaning up 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. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. 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. Keep out of the reach of children.

Incompatible Products Strong reducing agents. Combustible materials. Organic material. Incompatible with strong acids and bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium metaperiodate 7790-28-5	-	-	Not Established
Sodium sulfate 7757-82-6	-	-	Not Established

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). Goggles.

Skin and body protection Wear protective gloves/clothing.

Respiratory protection Maintain adequate ventilation.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	crystalline powder	Odor	Slight
Appearance	White		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4	(0.1g/10mL water)
Melting point / freezing point	300 °C	Sodium metaperiodate Decomposes
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	No information available	
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 normal conditions of use and storage.
Hazardous Reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks. Exposure to air or moisture over prolonged periods.
Incompatible materials	Strong reducing agents. Combustible materials. Organic material. Incompatible with strong acids and bases.
Hazardous decomposition products	Carbon oxides (COx). Nitrogen oxides (NOx). Sulfur oxides (SOx). Ammonia.

11. TOXICOLOGICAL INFORMATION

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

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium metaperiodate 7790-28-5	Not Established	Not Established	Not Established
Sodium sulfate 7757-82-6	> 10000 mg/kg (Rat)	Not Established	Not Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Sodium metaperiodate 7790-28-5	Not Established	Not Established	Not Established	Not Established
Sodium sulfate	Not Established	Not Established	Not Established	Not Established

7757-82-6				
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ATEmix (oral)

10320

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Sodium metaperiodate 7790-28-5	Not Established	Not Established	Not Established
Sodium sulfate 7757-82-6	Not Established	13500 - 14500: 96 h Pimephales promelas mg/L LC50 3040 - 4380: 96 h Lepomis macrochirus mg/L LC50 static 13500: 96 h Lepomis macrochirus mg/L LC50 6800: 96 h Pimephales promelas mg/L LC50 static	2564: 48 h Daphnia magna mg/L EC50 630: 96 h Daphnia magna mg/L EC50

Persistence and degradability

Inherently biodegradable, fulfilling criteria.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Sodium metaperiodate 7790-28-5	Not Established
Sodium sulfate 7757-82-6	Not Established

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents/containers in accordance with local regulations.

Contaminated packaging

Dispose of waste product or used containers according to local regulations.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Sodium metaperiodate 7790-28-5	Not Established	-	Not Established	Not Established
Sodium sulfate 7757-82-6	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 metaperiodate 7790-28-5	Not Established	Not Established	Not Established	Not Established
Sodium sulfate 7757-82-6	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Sodium metaperiodate 7790-28-5	-
Sodium sulfate 7757-82-6	-

14. TRANSPORT INFORMATION

DOT

UN-No

1479

Proper shipping name

OXIDIZING SOLID, N.O.S. (3% Sodium metaperiodate)

Hazard Class

5.1

Packing group

III

IATA

UN-No 1479
 Proper shipping name OXIDIZING SOLID, N.O.S. (Sodium metaperiodate)
 Hazard Class 5.1
 Packing group III

IMDG/IMO

UN-No 1479
 Proper shipping name OXIDIZING SOLID, N.O.S. (Sodium metaperiodate)
 Hazard Class 5.1
 Packing group III

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDL	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/NDL - 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 metaperiodate 7790-28-5	Not Established
Sodium sulfate 7757-82-6	Not Established

SARA 311/312 Hazard Categories

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

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	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous
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	Quantities			Substances
Sodium metaperiodate 7790-28-5	Not Established	Not Established	Not Established	Not Established
Sodium sulfate 7757-82-6	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 metaperiodate 7790-28-5	-	Not Established	-
Sodium sulfate 7757-82-6	-	Not Established	-

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

Chemical name	California Proposition 65
Sodium metaperiodate 7790-28-5	Not Established
Sodium sulfate 7757-82-6	Not Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium metaperiodate 7790-28-5	Not Established	Not Established	Not Established
Sodium sulfate 7757-82-6	Not Established	X	X

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances**16. OTHER INFORMATION****NFPA**

Health hazard 1

Flammability 0

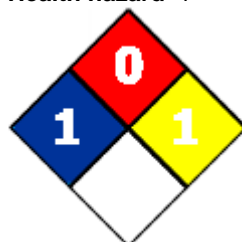
Instability 1

Physical and Chemical
Hazards OX

Health hazard 1

Flammability 0

Stability 1



Health Hazard	1
Fire Hazard	0
Reactivity	1

Prepared by
Issuing Date
Reason for revision

Regulatory Affairs Department
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New US GHS format

Disclaimer

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 Safety Data Sheet