

Issuing Date 2/1/2012

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name IRON REAGENT 2 POWDER

Product Code(s) 4451

Synonyms none

Recommended Use Test kit reagent. Industrial (not for food or food contact use). Laboratory chemicals.

Company LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620
USA

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**Emergency Overview**

May be harmful if swallowed
Irritating to eyes, respiratory system, and skin
Product dust may be irritating to eyes, skin and respiratory system
Contains sulfites - may produce allergic reaction in highly sensitive individuals

Appearance Gray**Physical State** Powder**Odor** Slight, Sulphurous**Potential Health Effects****Principle Routes of Exposure** Ingestion, and, Inhalation.**Acute Toxicity**

Eyes Irritating to eyes. Risk of serious damage to eyes.

Skin Irritating to skin.

Inhalation Irritating to respiratory system.

Ingestion Causes irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %
Zinc	-	1
Sodium sulfite	7757-83-7	1-5
2,2'-Bipyridine	366-18-7	5-10
Sodium metabisulfite	7681-57-4	80-90

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5021p, and may be disclosed only in a medical emergency.

4. FIRST AID MEASURES

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

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes.

Inhalation Move to fresh air. If symptoms arise, call a physician.

Ingestion Drink plenty of water. Clean mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.

Notes to Physician Treat symptomatically.

Protection of First-aiders Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce 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

Flammable Properties Not a fire hazard.

Flash Point Not applicable

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

Explosion Data

NFPA	Health Hazard 2	Flammability 0	Stability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2	Flammability 0	Stability 1	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Refer to Section 8.

Methods for Containment Sweep up in a manner that does not disperse dust and shovel into suitable containers for disposal. Dispose according to federal, state, and local regulations.

Methods for Cleaning Up Use personal protective equipment. Avoid dust formation. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

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

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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Zinc	None Known	None Known	None Known
Sodium sulfite 7757-83-7	None Known	None Known	None Known
2,2'-Bipyridine 366-18-7	None Known	None Known	None Known
Sodium metabisulfite 7681-57-4	TWA: 5 mg/m ³	None Known	N/A

Engineering Measures Showers
 Eyewash stations
 Ventilation systems.

Personal Protective Equipment
Eye/Face Protection Safety glasses with side-shields. 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

Appearance	Gray	Odor	Slight, Sulphurous
Physical State	Powder	pH	6 (1 tablet in 10mL of water)
Flash Point	Not applicable	Autoignition Temperature	Not applicable
Boiling Point/Range	No information available		
Freezing Point	ca. 150°C / 302°F sodium metabisulfite		

Water Solubility	Soluble in water	Vapor Pressure	No information available
Vapor Density	No information available		

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of use and storage.

Incompatible Products Acids. Alkalis. Strong oxidizing agents.

Conditions to Avoid Excessive heat. Exposure to air or moisture over prolonged periods. Keep away from children.

Hazardous Decomposition Products Carbon oxides (COx). Sulfur oxides (SOx). Sodium oxides.

Hazardous Reactions None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Zinc	None Known	None Known	None Known

Sodium sulfite	820 mg/kg (Rat)	None Known	22 mg/L (Rat) 1 h 5.5 mg/L (Rat) 4 h
2,2'-Bipyridine	100 mg/kg (Rat)	250 mg/kg (Rat)	None Known
Sodium metabisulfite	1131 mg/kg (Rat)	None Known	None Known

Chronic Toxicity

Chemical Name	ACGIH	IARC	NTP	OSHA
Zinc	None Known	None Known	None Known	None Known
Sodium sulfite	None Known	None Known	None Known	None Known
2,2'-Bipyridine	None Known	None Known	None Known	None Known
Sodium metabisulfite	None Known	None Known	None Known	None Known

Endocrine Disruptor Information

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Zinc	None Known	None Known	None Known
Sodium sulfite	None Known	None Known	None Known
2,2'-Bipyridine	None Known	None Known	None Known
Sodium metabisulfite	None Known	None Known	None Known

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Harmful to aquatic organisms.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Zinc	EC50 = 30 µg/L 96 h	LC50= 6.4 mg/L Pimephales promelas 96 h	None Known	EC50 = 5 µg/L 72 h
Sodium sulfite	None Known	LC50 220 - 460 mg/L Leuciscus idus 96 h	EC50 = 770 mg/L 17 h	LC50 = 330 mg/L 24 h
2,2'-Bipyridine	None Known	None Known	None Known	None Known
Sodium metabisulfite	EC50 = 40 mg/L 96 h EC50 = 48 mg/L 72 h	LC50= 32 mg/L Lepomis macrochirus 96 h	EC50 = 56 mg/L 17 h	EC50 = 89 mg/L 24 h

Chemical Name	Log Pow
Zinc	None Known
Sodium sulfite	= -4 25 °C
2,2'-Bipyridine	None Known
Sodium metabisulfite	= -3.7 25 °C

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of contents/container in accordance with local regulation. This material, as supplied, is not a hazardous waste according to state and Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste pursuant to Federal regulations, and the applicable state requirements for the specific area of disposal. Consult the appropriate state, regional, or local regulations for additional requirements.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Zinc -	None Known	None Known	None Known	None Known
Sodium sulfite - 7757-83-7	None Known	None Known	None Known	None Known
2,2'-Bipyridine - 366-18-7	None Known	None Known	None Known	None Known
Sodium metabisulfite - 7681-57-4	None Known	None Known	None Known	None Known

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.(SODIUM DISULPHITE)
Hazard Class 8
UN-No 3260
Packing Group III

IATA

UN-No 3260
Proper Shipping Name CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.(SODIUM DISULPHITE)
Hazard Class 8
Packing Group III

IMDG/IMO

Proper Shipping Name CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (SODIUM DISULPHITE)
Hazard Class 8
UN-No 3260

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Zinc (1)	Present	X	X	ENCS	X	KE-35518	X	X
Sodium sulfite 7757-83-7 (1-5)	Present	X	X	1-502	X	KE-31612	X	X
2,2'-Bipyridine 366-18-7 (5-10)	Present	X	X	5-3723	X	KE-12238	X	X
Sodium metabisulfite 7681-57-4 (80-90)	Present	X	X	1-502	X	KE-12701	X	X

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Zinc		1	1.0
Sodium sulfite	7757-83-7	1-5	None Known
2,2'-Bipyridine	366-18-7	5-10	None Known
Sodium metabisulfite	7681-57-4	80-90	None Known

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	Yes

Clean Water Act

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc (1)	None Known	X	X	None Known
Sodium sulfite 7757-83-7 (1-5)	None Known	None Known	None Known	None Known
2,2'-Bipyridine 366-18-7 (5-10)	None Known	None Known	None Known	None Known
Sodium metabisulfite 7681-57-4 (80-90)	None Known	None Known	None Known	None Known

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Zinc		1	None Known	None Known	None Known	None Known
Sodium sulfite	7757-83-7	1-5	None Known	None Known	None Known	None Known
2,2'-Bipyridine	366-18-7	5-10	None Known	None Known	None Known	None Known
Sodium metabisulfite	7681-57-4	80-90	None Known	None Known	None Known	None Known

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Zinc	1000 lb	None Known
Sodium sulfite	None Known	None Known
2,2'-Bipyridine	None Known	None Known
Sodium metabisulfite	None Known	None Known

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

Chemical Name	CAS-No	California Prop. 65
Zinc		None Known
Sodium sulfite	7757-83-7	None Known
2,2'-Bipyridine	366-18-7	None Known
Sodium metabisulfite	7681-57-4	None Known

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Zinc	X	X	X	None Known	X
Sodium sulfite	None Known	None Known	None Known	None Known	None Known
2,2'-Bipyridine	None Known	None Known	None Known	None Known	None Known
Sodium metabisulfite	X	X	X	None Known	X

International Regulations

Mexico - Grade

Chemical Name	Carcinogen Status	Exposure Limits
Zinc	None Known	None Known
Sodium sulfite	None Known	None Known
2,2'-Bipyridine	None Known	None Known
Sodium metabisulfite	None Known	None Known

Canada



This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

Component	WHMIS Hazard Class
Zinc (1)	Not determined
Sodium sulfite 7757-83-7 (1-5)	Uncontrolled product according to WHMIS classification criteria
2,2'-Bipyridine 366-18-7 (5-10)	D1B
Sodium metabisulfite 7681-57-4 (80-90)	1 % Uncontrolled product according to WHMIS classification criteria



Chemical Name	NPRI
Zinc	X

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Fire Hazard</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Reactivity</td> <td style="text-align: center;">1</td> </tr> </table>	Health Hazard	2	Fire Hazard	0	Reactivity	1		
Health Hazard	2								
Fire Hazard	0								
Reactivity	1								

Prepared By Regulatory Affairs Department

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Revision Note
Initial Release

Disclaimer

The information provided on this MSDS 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 MSDS