

Issuing Date 7/26/2012

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name SODIUM CYANIDE, 10%

Product Code(s) 6565

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

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**POISON! DANGER!****Emergency Overview**

CORROSIVE

MAY BE FATAL IF SWALLOWED

May be fatal if absorbed through skin

May be harmful if inhaled

Contact with acid liberates poisonous gas

May cause burns to eyes, skin, and mucous membranes

Appearance Clear, colorless**Physical State** Liquid**Odor** Slight, Almond

OSHA Regulatory Status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Health Effects

Principle Routes of Exposure Skin contact, Ingestion.

Acute Toxicity**Eyes**

Irritating to eyes. May cause burns. Causes irritation, redness, and pain. May be absorbed through the eye in harmful amounts.

Skin

Irritating to skin. May cause burns. May be fatal if absorbed through skin.

Inhalation

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Cyanosis.

Ingestion

Corrosive. May be fatal if swallowed. Cyanosis.

Chronic Effects

Prolonged exposure may cause chronic effects. Repeated or prolonged exposure may cause central nervous system damage. Prolonged or repeated inhalation may cause damage to the lungs.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Sodium hydroxide	1310-73-2	0.2
Sodium cyanide	143-33-9	10
Water	7732-18-5	to 100%

4. FIRST AID MEASURES

General Advice	An emergency cyanide poisoning antidote kit should be available prior to any work with cyanide (amyl nitrite, sodium nitrite and sodium thiosulfate). A course of action should also be planned, practiced, and included in the kit.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Call a physician immediately.
Inhalation	Call a physician immediately. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel.
Ingestion	Call a physician or Poison Control Center immediately. Give activated charcoal. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
Notes to Physician	Symptoms may be delayed.
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 flammable. Contact with acids causes this material to release highly flammable and toxic hydrogen cyanide gas.			
Flash Point	Not applicable			
Suitable Extinguishing Media	Dry chemical.			
Unsuitable Extinguishing Media	Do not use CO ₂ (Carbon dioxide). Can react with this material to produce hydrogen cyanide.			
Explosion Data				
NFPA	Health Hazard 3	Flammability 0	Stability 1	Physical and Chemical Hazards -
HMIS	Health Hazard 3	Flammability 0	Stability 2	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Refer to Section 8. Evacuate personnel to safe areas. Ensure adequate ventilation. Allow only qualified personnel to clear spill. Wear respiratory protection. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and inhalation of vapors.
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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). Do not flush to sewer.
Methods for Cleaning Up	Clean spill area with sodium hypochlorite solution. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Handling	Refer to Section 8. Use only in area provided with appropriate exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink, or smoke when using this product.
Storage	Keep containers tightly closed in a dry, cool, and well-ventilated place. Store away from strong acids and oxidizers. Ensure that leaks or spills cannot reach drains, sewers or surface waters.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide 1310-73-2	None Known	TWA: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³
Sodium cyanide 143-33-9	None Known	TWA: 5 mg/m ³	IDLH: 25 mg/m ³ Ceiling: 4.7 ppm Ceiling: 5 mg/m ³
Water 7732-18-5	None Known	None Known	None Known

NIOSH IDLH: Immediately Dangerous to Life or Health

Engineering Measures	Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Use only under a chemical fume hood.
Personal Protective Equipment	
Eye/Face Protection	Safety glasses with side-shields. Face-shield.
Skin and Body Protection	Impervious clothing. Gloves & Lab Coat.
Respiratory Protection	Use mechanical ventilation (fume hood). 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

Appearance	Clear, colorless	Odor	Slight, Almond
Physical State	Liquid	pH	9 (0.25g/10mL water)
Flash Point	Not applicable	Boiling Point/Range	No data available
Vapor Pressure	No information available	Vapor Density	No information available

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions of use and storage. Stable under recommended storage conditions.
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Incompatible Products	Acids. Strong oxidizing agents.
Conditions to Avoid	Moisture. Incompatible products.
Hazardous Decomposition Products	Hydrogen cyanide. Reacts with carbon dioxide in air to form hydrogen cyanide gas.
Hazardous Reactions	Reacts with acids to liberate toxic and flammable hydrogen cyanide gas.
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information Expected to be very toxic by ingestion based on rat oral LD50 of active ingredient.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hydroxide	None Known	1350 mg/kg (Rabbit)	None Known
Sodium cyanide	6.44 mg/kg (Rat)	10.4 mg/kg (Rabbit)	None Known
Water	90 mL/kg (Rat)	None Known	None Known

Chronic Toxicity

Chronic Toxicity Prolonged exposure may cause chronic effects. Repeated or prolonged exposure may cause central nervous system damage. Prolonged or repeated inhalation may cause damage to the lungs.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hydroxide	None Known	None Known	None Known	None Known
Sodium cyanide	None Known	None Known	None Known	None Known
Water	None Known	None Known	None Known	None Known

Target Organ Effects Respiratory system, Blood, Central nervous system (CNS), Skin, Thyroid.

Endocrine Disruptor Information

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Sodium hydroxide	None Known	None Known	None Known
Sodium cyanide	None Known	None Known	None Known
Water	None Known	None Known	None Known

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Sodium hydroxide	None Known	LC50= 45.4 mg/L Oncorhynchus mykiss 96 h	None Known	None Known
Sodium cyanide	None Known	LC50 0.05 - 0.075 mg/L Oncorhynchus mykiss 96 h LC50= 0.083 mg/L Lepomis macrochirus 96 h LC50= 0.12 mg/L Pimephales promelas 96 h	None Known	EC50 = 0.17 mg/L 96 h
Water	None Known	None Known	None Known	None Known

Persistence and Degradability No information available.

Chemical Name	Log Pow
Sodium hydroxide	None Known
Sodium cyanide	None Known
Water	None Known

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with local regulations. This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Should not be released into the environment.

US EPA Waste Number US EPA Waste Number

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sodium hydroxide - 1310-73-2	None Known	None Known	None Known	None Known
Sodium cyanide - 143-33-9	None Known	P106	None Known	None Known
Water - 7732-18-5	None Known	None Known	None Known	None Known

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name CYANIDE SOLUTION, N.O.S. (10% Sodium Cyanide)
Hazard Class 6.1
UN-No 1935
Packing Group I

IATA

UN-No 1935
Proper Shipping Name CYANIDE SOLUTION, N.O.S. (10% Sodium Cyanide)
Hazard Class 6.1
Packing Group I

IMDG/IMO

Proper Shipping Name CYANIDE SOLUTION, N.O.S. (10% Sodium Cyanide)

Hazard Class	6.1
UN-No	1935
Packing Group	I

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Sodium hydroxide 1310-73-2 (0.2)	Present	X	X	1-410; 2-1972	X	KE-31487	X	X
Sodium cyanide 143-33-9 (10)	T	X	X	1-158; 1-159	X	KE-31401	X	X
Water 7732-18-5 (to 100%)	Present	X	X	ENCS	X	KE-35400	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 %
Sodium hydroxide	1310-73-2	0.2	None Known
Sodium cyanide	143-33-9	10	1.0
Water	7732-18-5	to 100%	None Known

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

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide 1310-73-2 (0.2)	None Known	None Known	None Known	None Known
Sodium cyanide 143-33-9 (10)	10 lb	None Known	None Known	X
Water 7732-18-5 (to 100%)	None Known	None Known	None Known	None Known

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

This product does not contain any HAPs.

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Sodium hydroxide	1310-73-2	0.2	None Known	None Known	None Known	None Known
Sodium cyanide	143-33-9	10	None Known	None Known	None Known	None Known
Water	7732-18-5	to 100%	None Known	None Known	None Known	None Known

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Sodium hydroxide	1000 lb	None Known
Sodium cyanide	10 lb	10 lb
Water	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
Sodium hydroxide	1310-73-2	None Known
Sodium cyanide	143-33-9	None Known
Water	7732-18-5	None Known

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium hydroxide	X	X	X	None Known	X
Sodium cyanide	X	X	X	None Known	X
Water	None Known	None Known	None Known	None Known	None Known

International Regulations

Mexico - Grade

Chemical Name	Carcinogen Status	Exposure Limits
Sodium hydroxide	None Known	None Known
Sodium cyanide	None Known	Mexico: TWA= 5 mg/m ³
Water	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
Sodium hydroxide 1310-73-2 (0.2)	1 % E
Sodium cyanide 143-33-9 (10)	1 % D1A E
Water 7732-18-5 (to 100%)	Uncontrolled product according to WHMIS classification criteria



16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td data-bbox="509 203 716 243">Health Hazard</td> <td data-bbox="721 203 792 243">3</td> </tr> <tr> <td data-bbox="509 249 716 289">Fire Hazard</td> <td data-bbox="721 249 792 289">0</td> </tr> <tr> <td data-bbox="509 296 716 336">Reactivity</td> <td data-bbox="721 296 792 336">2</td> </tr> </table>	Health Hazard	3	Fire Hazard	0	Reactivity	2		
Health Hazard	3								
Fire Hazard	0								
Reactivity	2								

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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