Material Safety Data Sheet

Issuing Date 11/2/2012 **Revision Number** 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name **HARDNESS REAGENT #6**

Product Code(s) 4485

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

POISON! DANGER!

Emergency Overview

Highly flammable
Harmful by inhalation, in contact with skin and if swallowed
Inhalation, ingestion, or skin absorbtion of methanol can cause blindness
Affects central nervous system
May cause skin and eye irritation

Appearance Dark Purple **Physical State** Liquid **Odor** Alcohol

Potential Health Effects

Principle Routes of Exposure Eye or skin contact, ingestion, and inhalation.

Acute Toxicity

Eyes May cause irritation.

Skin Harmful if absorbed through skin. May cause skin irritation and/or dermatitis. Prolonged skin contact may defat the skin and produce dermatitis.

Inhalation May cause irritation of respiratory tract. Symptoms of overexposure include dizziness, headache, drowsiness, cough.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. May cause drowsiness and dizziness. May also cause weakness, blurred vision, gastrointestinal disturbance, nausea, diarrhea, respiratory arrest, or circulatory collapse.

Chronic Effects Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family Ethanol solution.

Chemical Name	CAS-No	Weight %
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	3147-14-6	0.1
Methyl alcohol	67-56-1	4
Ethyl alcohol	64-17-5	80
Water	7732-18-5	to 100%

4. FIRST AID MEASURES

General Advice Do not get in eyes, on skin, or on clothing.

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

Skin Contact Wash skin with soap and water. If irritation develops or persists, consult physician.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel. Call a physician immediately.

Ingestion Drink large quantity of water. Call a physician immediately.

Notes to Physician Treat symptomatically.

Protection of First-aiders Use personal protective equipment. 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 Flammable.
Flash Point 16°C (60.8°F) CC for SDA (3A) Ethyl Alcohol

Suitable Extinguishing Media Water spray, dry chemical, carbon dioxide (CO_2), or foam.
Explosion Data
Specific Hazards Arising from the Chemical
Vapors may travel to source of ignition and flash back.

NFPA	**Health Hazard** 1	**Flammability** 3	**Stability** 0	**Physical and Chemical Hazards** -
HMIS	**Health Hazard** 2	**Flammability** 3	**Stability** 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Refer to Section 8.

Methods for Containment Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

Methods for Cleaning Up Soak up with inert absorbent material. 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 sources of ignition. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]- 3147-14-6	None Known	None Known	None Known
Methyl alcohol 67-56-1	250	TWA: 200 ppm TWA: 260 mg/m³	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³
Ethyl alcohol 64-17-5	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m³
Water 7732-18-5	None Known	None Known	None Known

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection Use only with adequate ventilation.

Hygiene Measures Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Dark Purple

Physical State Liquid

Flash Point 16°C (60.8°F) CC for SDA (3A) Ethyl Alcohol

Odor Alcohol

pH Not applicable

Boiling Point/Range 78.5°C (173.3°F) for SDA (3A) Ethyl Alcohol

Explosion Limits

Upper 19% Ethanol

Lower 3.3% Ethanol

Vapor Pressure 48 mmHg @ 20 °C for SDA (3A) Ethyl Alcohol

Vapor Density 1.6 @ 20°C (Air=1) for SDA (3A) Ethyl Alcohol

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of use and storage.

Incompatible Products Strong inorganic acids and oxidizing agents.

Conditions to Avoid Heat, flames and sparks.

Hazardous Decomposition Products Carbon oxides (COx).

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation

1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	None Known	None Known	None Known
Methyl alcohol	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	64000 ppm (Rat) 4 h 83.2 mg/L (Rat) 4 h
Ethyl alcohol	1501 mg/kg (Rat)	None Known	124.7 mg/L (Rat) 4 h
Water	90 mL/kg (Rat)	None Known	None Known

Chronic Toxicity

Chronic Toxicity Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	None Known	None Known	None Known	None Known
Methyl alcohol	None Known	None Known	None Known	None Known
Ethyl alcohol	None Known	None Known	Known	None Known
Water	None Known	None Known	None Known	None Known

Chemical Name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	None Known	None Known	None Known
Methyl alcohol	None Known	None Known	None Known
Ethyl alcohol	None Known	None Known	None Known
Water	None Known	None Known	None Known

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	None Known	None Known	None Known	None Known
Methyl alcohol	None Known	LC50 13500 - 17600 mg/L Lepomis macrochirus 96 h LC50 18 - 20 mL/L Oncorhynchus mykiss 96 h LC50 19500 - 20700 mg/L Oncorhynchus mykiss 96 h LC50= 28200 mg/L Pimephales promelas 96 h LC50> 100 mg/L Pimephales promelas 96 h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	None Known
Ethyl alcohol	None Known	LC50= 12900 mg/L Oncorhynchus mykiss 96 h LC50= 14.2 mg/L Pimephales promelas 96 h	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	EC50 = 10800 mg/L 24 h EC50 = 9268 mg/L 48 h
Water	None Known	None Known	None Known	None Known

Persistence and Degradability No information available.

Bioaccumulation/Accumulation No information available.

Chemical Name	Log Pow
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	None Known
Methyl alcohol	= -0.77
Ethyl alcohol	= -0.32
Water	None Known

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with local regulations.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]- - 3147-14-6	None Known	None Known	None Known	None Known
Methyl alcohol - 67-56-1	None Known	None Known	None Known	None Known
Ethyl alcohol - 64-17-5	None Known	None Known	None Known	None Known
Water - 7732-18-5	None Known	None Known	None Known	None Known

Chemical Name	California Hazardous Waste Status
Ethyl alcohol	Toxic; Ignitable

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name ETHANOL SOLUTION (Ethyl Alcohol Solution)
Hazard Class 3
UN-No 1170
Packing Group II

IATA

UN-No 1170
Proper Shipping Name ETHANOL SOLUTION (Ethyl Alcohol Solution)
Hazard Class 3
Packing Group II

IMDG/IMO

Proper Shipping Name ETHANOL SOLUTION (Ethyl Alcohol Solution)
Hazard Class 3
UN-No 1170
Packing Group II

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]- 3147-14-6 (0.1)	Present	X	X	ENCS	X	KECL	X	X
Methyl alcohol 67-56-1 (4)	Present	X	X	(2)-201	X	KECL	X	X
Ethyl alcohol 64-17-5 (80)	Present	X	X	2-202	X	KE-13217	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 %
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	3147-14-6	0.1	None Known
Methyl alcohol	67-56-1	4	1.0
Ethyl alcohol	64-17-5	80	None Known
Water	7732-18-5	to 100%	None Known

SARA 311/312 Hazard Categories

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

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).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]- 3147-14-6 (0.1)	None Known	None Known	None Known	None Known
Methyl alcohol 67-56-1 (4)	None Known	None Known	None Known	None Known
Ethyl alcohol 64-17-5 (80)	None Known	None Known	None Known	None Known
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)

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Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	3147-14-6	0.1	None Known	None Known	None Known	None Known
Methyl alcohol	67-56-1	4	Present	Group IV	None Known	None Known
Ethyl alcohol	64-17-5	80	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
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	None Known	None Known
Methyl alcohol	5000 lb	None Known
Ethyl alcohol	None Known	None Known
Water	None Known	None Known

U.S. State Regulations

California Proposition 65

WARNING! This product contains chemicals know to the State of California to cause cancer and birth defects or other reproductive harm (Ethyl alcohol is only considered a Proposition 65 cancer and developmental hazard when it is ingested as an alcoholic beverage)

Chemical Name	CAS-No	California Prop. 65

1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	3147-14-6	None Known
Methyl alcohol	67-56-1	Developmental
Ethyl alcohol	64-17-5	Carcinogen
Water	7732-18-5	None Known

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	None Known	None Known	None Known	None Known	None Known
Methyl alcohol	X	X	X	X	X
Ethyl alcohol	X	X	X	None Known	X
Water	None Known	None Known	None Known	None Known	None Known

International Regulations

Mexico - Grade Mexico - Grade

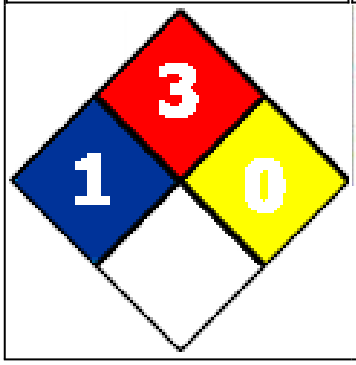
Chemical Name	Carcinogen Status	Exposure Limits
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]-	None Known	None Known
Methyl alcohol	None Known	Mexico: TWA 200 ppm Mexico: TWA 260 mg/m^3
Ethyl alcohol	None Known	Mexico: TWA= 1000 ppm Mexico: TWA= 1900 mg/m^3
Water	None Known	None Known

Canada

Component	WHMIS Hazard Class
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-5-methylphenyl)azo]- 3147-14-6 (0.1)	Not determined
Methyl alcohol 67-56-1 (4)	1 % B2 D1B D2A D2B
Ethyl alcohol 64-17-5 (80)	0.1 % B2 D2B
Water 7732-18-5 (to 100%)	Uncontrolled product according to WHMIS classification criteria

Chemical Name	NPRI
Methyl alcohol	X

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol
			

Prepared By	Regulatory Affairs Department
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Revision Date	-
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Disclaimer

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End of MSDS