

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

**Product identifier**

**Product name** HARDNESS REAGENT #6

**Other means of identification**

**Product Code(s)** AF-4485  
**UN-No** 1170

**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**

Flammable Liquids

Category 2

**EMERGENCY OVERVIEW**

**DANGER**

**Hazard statements**

Highly flammable liquid and vapor.



**Appearance** dark purple

**Physical state** liquid

**Odor** Alcohol

**Precautionary Statements - Prevention**

Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 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/container to an approved waste disposal plant.

**Unknown Acute Toxicity**

100% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****4. FIRST AID MEASURES****First Aid Measures**

<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Call a physician immediately.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. Call a physician immediately.
<b>Ingestion</b>	Rinse mouth. Drink large quantity of water. Call a physician immediately.
<b><u>Self-protection of the first aider</u></b>	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.
<b>Notes to Physician</b>	Treat symptomatically.

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

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

**Specific hazards arising from the chemical**

Vapors may travel to source of ignition and flash back.

**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**

<b>Personal precautions</b>	See section 8.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.
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**Methods for cleaning up** Soak up with inert absorbent material. 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. Keep away from heat and sources of ignition. Keep out of the reach of children.

**Incompatible Products** Strong inorganic acids and oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 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** Chemical resistant apron.

**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

<b>Physical state</b>	liquid	<b>Odor</b>	Alcohol
<b>Appearance</b>	dark purple		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>		
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	78.5 °C / 173.3 °F	
<b>Flash point</b>	16 °C / 60.8 °F	for SDA (3A) Ethyl Alcohol
<b>Evaporation rate</b>		
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	1.6	
<b>Specific gravity</b>	No information available	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	

<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable under recommended storage conditions.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	Strong inorganic acids and oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides (CO <sub>x</sub> ).

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Component Information****Information on toxicological effects**

mg/kg mg/l

Oral LD50

Dermal LD50 No information available

**12. ECOLOGICAL INFORMATION****Ecotoxicity****Unknown Aquatic Toxicity** 100 % of the mixture consists of component(s) of unknown hazards to the aquatic environment**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

**13. DISPOSAL CONSIDERATIONS**

<b>Disposal Methods</b>	Dispose of waste product or used containers according to local regulations.
<b>Contaminated packaging</b>	Do not reuse empty containers.

**14. TRANSPORT INFORMATION****DOT****Proper shipping name** ETHANOL SOLUTION (Ethyl Alcohol Solution)

UN-No	1170
Hazard Class	3
Packing group	II

**IATA**

Proper shipping name	ETHANOL SOLUTION (Ethyl Alcohol Solution)
UN-No	1170
Hazard Class	3
Packing group	II

**IMDG/IMO**

Proper shipping name	ETHANOL SOLUTION (Ethyl Alcohol Solution)
UN-No	1170
Hazard Class	3
Packing group	II

<b>15. REGULATORY INFORMATION</b>
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**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

**SARA 311/312 Hazard Categories**

Acute health hazard	No
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)

**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

**US State Regulations**

**U.S. State Right-to-Know Regulations**

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	Health hazard 0	Flammability 0	Instability 0	<b>Physical and Chemical Hazards</b> N/A
<b><u>HMIS</u></b>	Health hazard 0	Flammability 0	Stability 0	
Prepared by	Regulatory Affairs Department			
Issuing Date	Apr-21-2015			
Revision Date	May-05-2015			
Reason for revision	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 Material Safety Data Sheet**