

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

### Product identifier

**Product name** REAGENT B (COPPER B)

### Other means of identification

**Product Code(s)** CC-6368

**UN-No** 1219

### Recommended use of the chemical and restrictions on use

**Recommended Use** Use as a laboratory reagent. Laboratory chemicals. Industrial (not for food or food contact use).

### 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

Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Physical hazards Flammable Liquids.	Category 2

### EMERGENCY OVERVIEW

#### **DANGER**

#### **Hazard statements**

Causes serious eye irritation. May cause cancer. May cause drowsiness or dizziness. .  
Highly flammable liquid and vapor.



**Appearance** Clear, colorless

**Physical state** liquid

**Odor** Rubbing alcohol Alcohol

#### **Precautionary Statements - Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. 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. Keep cool.

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED, Drink 1 or 2 glasses of water, Call a physician immediately

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

**Other Hazards**

May be harmful if swallowed

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS No	Weight-%
Ethanedioic acid, bis(cyclohexylidenehydrazide)	370-81-0	0.4
Isopropyl alcohol	67-63-0	50

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

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

**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. If skin irritation persists, call a physician.

**Inhalation**

Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel.

**Ingestion**

Drink large quantity of water. Drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

**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**

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

**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**

**Personal precautions** See section 8. Avoid contact with eyes, skin and clothing.

**Environmental precautions** See Section 12 for additional Ecological Information.

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

**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).

**Methods for cleaning up** Use personal protective equipment. 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). Following product recovery, flush area 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. Keep away from heat, sparks and open flame. No smoking.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from strong acids and oxidizers. Keep away from heat and sources of ignition. Keep out of the reach of children.

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanedioic acid, bis(cyclohexylidenehydrazide) 370-81-0	-	-	Not Established
Isopropyl alcohol 67-63-0	400 ppm STEL TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup>	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>

NIOSH IDLH: Immediately Dangerous to Life or Health

**Appropriate engineering controls**

**Engineering Measures** Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

<b>Skin and body protection</b>	Gloves & Lab Coat. Wear suitable protective clothing.
<b>Respiratory protection</b>	Use only with adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Odor</b>	Rubbing alcohol Alcohol
<b>Appearance</b>	Clear, colorless		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
		No information available	
<b>pH</b>			
<b>Melting point / freezing point</b>	No information available		
<b>Boiling point / boiling range</b>	82 °C		
<b>Flash point</b>	18 °C (Calculated based on percentage of Isopropyl Alcohol)		
<b>Evaporation rate</b>			
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
Upper flammability limit:	12		
Lower flammability limit:	2		
<b>Vapor pressure</b>	33 at 20°C		
<b>Vapor density</b>	2.1 (Air=1)		
<b>Specific gravity</b>	No information available		
<b>Water solubility</b>	No information available		
<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 normal conditions of use and storage. Heat and sunlight can contribute to instability.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks. Incompatible products.
<b>Incompatible materials</b>	Strong acids. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	May produce the following when heated to decomposition: Carbon oxides (COx).

## 11. TOXICOLOGICAL INFORMATION

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

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanedioic acid, bis(cyclohexylidenehydrazide) 370-81-0	Not Established	Not Established	Not Established
Isopropyl alcohol 67-63-0	= 1870 mg/kg ( Rat )	= 4059 mg/kg ( Rabbit )	= 72600 mg/m <sup>3</sup> ( Rat ) 4 h

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA
Ethanedioic acid, bis(cyclohexylidenehydrazide) 370-81-0	Not Established	Not Established	Not Established	Not Established
Isopropyl alcohol 67-63-0	Not Established	Group 3	Not Established	X

**IARC (International Agency for Research on Cancer)**

Group 3 - Not classifiable as to its carcinogenicity to humans

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

ATEmix (oral) 3740  
ATEmix (dermal) 8118 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

**Unknown Aquatic Toxicity** 50 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Ethanedioic acid, bis(cyclohexylidenehydrazide) 370-81-0	Not Established	Not Established	Not Established
Isopropyl alcohol 67-63-0	1000: 72 h Desmodesmus subspicatus mg/L EC50 1000: 96 h Desmodesmus subspicatus mg/L EC50	11130: 96 h Pimephales promelas mg/L LC50 static 9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50	13299: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

Isopropyl alcohol: When released into the soil or water, this material is expected to quickly evaporate. When released into the soil or water, this material may biodegrade to a moderate extent. When released into the water or air, this material is expected to have a half-life between 1 and 10 days. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition.

**Bioaccumulation/Accumulation**

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

Chemical name	Log Pow
Ethanedioic acid, bis(cyclohexylidenehydrazide) 370-81-0	Not Established
Isopropyl alcohol 67-63-0	0.05

**13. DISPOSAL CONSIDERATIONS**

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

**Contaminated packaging** Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Ethanedioic acid,	Not Established	-	Not Established	Not Established

bis(cyclohexylidenehydrazide) 370-81-0				
Isopropyl alcohol 67-63-0	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Ethanedioic acid, bis(cyclohexylidenehydrazide) 370-81-0	Not Established	Not Established	Not Established	Not Established
Isopropyl alcohol 67-63-0	Not Established	Not Established	Not Established	Not Established

California Waste Status. This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Ethanedioic acid, bis(cyclohexylidenehydrazide) 370-81-0	-
Isopropyl alcohol 67-63-0	-

#### 14. TRANSPORT INFORMATION

##### DOT

Proper shipping name ISOPROPANOL  
UN-No 1219  
Hazard Class 3  
Packing group II

##### IATA

Proper shipping name ISOPROPANOL  
UN-No 1219  
Hazard Class 3  
Packing group II

##### IMDG/IMO

Proper shipping name ISOPROPANOL  
UN-No 1219  
Hazard Class 3  
Packing group II

#### 15. REGULATORY INFORMATION

##### 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/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 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	SARA 313 - Threshold Values %
Ethanedioic acid, bis(cyclohexylidenehydrazide) 370-81-0	Not Established
Isopropyl alcohol 67-63-0	1.0

#### 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

#### CWA (Clean Water Act)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ethanedioic acid, bis(cyclohexylidenehydrazide) 370-81-0	Not Established	Not Established	Not Established	Not Established
Isopropyl alcohol 67-63-0	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
Ethanedioic acid, bis(cyclohexylidenehydrazide) 370-81-0	-	Not Established	-
Isopropyl alcohol 67-63-0	-	Not Established	-

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals

Chemical name	California Proposition 65
Ethanedioic acid, bis(cyclohexylidenehydrazide) 370-81-0	Not Established
Isopropyl alcohol 67-63-0	Not Established

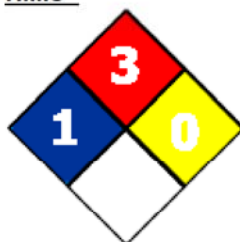
#### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethanedioic acid, bis(cyclohexylidenehydrazide)	Not Established	Not Established	Not Established

370-81-0			
Isopropyl alcohol 67-63-0	X	X	X

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

<u>NFPA</u>	Health hazard 1	Flammability 3	Instability 0	Physical and Chemical Hazards N/A
<u>HMIS</u>	Health hazard 2	Flammability 3	Stability 0	



HEALTH	2
FLAMMABILITY	3
REACTIVITY	0

Prepared by  
 Issuing Date  
 Revision Date  
 Reason for revision  
 Disclaimer

Regulatory Affairs Department  
 Apr-06-2015  
 Jul-14-2015  
 New US GHS format

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**