

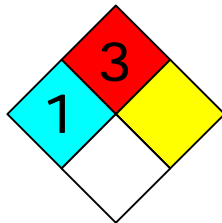

MATERIAL SAFETY DATA SHEET

PRODUCT: LCS1

Issue Date: 6/10/11

Revision Date:

Revision Number:

NFPA	HMIS	PPE	Transport Symbol								
	<table><tr><td>Health Hazard</td><td>1</td></tr><tr><td>Fire Hazard</td><td>3</td></tr><tr><td>Physical Hazard</td><td></td></tr><tr><td>Personal Protection</td><td></td></tr></table>	Health Hazard	1	Fire Hazard	3	Physical Hazard		Personal Protection			
Health Hazard	1										
Fire Hazard	3										
Physical Hazard											
Personal Protection											

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: LCS1 Lens Cleaning Station
Product Number(s): LCS1

Recommended Use: Lens cleaner. Instrument care. Water based cleaner.

Supplier Information:

MCR Safety
 5321 E. Shelby Drive, Memphis, Tennessee, 38118 USA
 Phone: 1-901-795-5810
 Fax:
 Contact:
 Contact Phone:
Emergency Phone: Call INFOTRAK - 1-800-535-5053

2. HAZARDS IDENTIFICATION

Potential Health Effects

Principal Routes of Exposure Skin contact.

Acute Toxicity

Eyes

Skin

Inhalation

Ingestion

Vapor may cause irritation.

May be harmful in contact with skin. May cause irritation.

May be harmful if inhaled. Avoid breathing vapors or mists. May cause irritation of respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, vomiting and incoordination.

May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects

Avoid repeated exposure. Contains a known or suspected reproductive toxin.

Aggravated Medical Conditions

Central nervous system. Preexisting eye disorders. Blood disorders. Kidney disorders. Liver disorders. Overexposure may cause female and male reproductive disorder(s). Skin disorders. Respiratory disorders.

Interactions w/ Other Chemicals

Use of alcoholic beverages may enhance toxic effects.

Environmental Hazards See section 12

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3. INGREDIENTS (wetting solution only)

Chemical Name	CAS No.	% by Weight
Water	7732-18-5	75 - 90
Isopropyl Alcohol	67-63-0	10 - 25
Benzyl Amonium Chloride	68391-01-5	<1
Denatured Ethyl Alcohol	64-17-5	<0.5

4. FIRST AID MEASURES

Eye Contact	Rinse Immediately with plenty of clean water, also under eyelids, for at least 15 minutes. Keep eyes wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Wash with soap and water. If irritation persists, or allergic reaction occurs, call a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms persist, call a physician.
Ingestion	DO NOT induce vomiting. Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Notes to Physicians	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammable Properties	Combustible material.
Flash Point (°F) – Closed Cup	91°
Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Hazardous Byproducts of Combustion	Carbon oxides
Explosion Data	
Sensitivity to Mechanical Impact	Not sensitive
Sensitivity to Static Discharge	Yes
Protective Equipment	Wear self contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear.
Special Precautions	Solvent vapors may cause flashback

NFPA Health Hazard: 1 Flammability: 3 Stability: 0 Physical & Chemical Hazards:

6. ACCIDENTAL RELEASE & SPILL MEASURES

Personal Precautions	Use personal protective equipment. Avoid contact with skin and eyes. Remove all sources of ignition.
Containment Methods	Prevent further leakage or spillage if safe to do so.
Clean-up Methods	Use personal protective equipment. Soak up with absorbent material. Pick up and transfer to properly labeled containers.

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7. HANDLING AND STORAGE

Handling

Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin and clothing. Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children.

Storage

Keep container tightly closed. Keep away from open flames. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl Alcohol	+ 400 ppm STEL TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 1225 mg/m ³ (vacated) STEL: 500 ppm	IDLH: 2000 ppm 10% LEL TWA: 400 ppm TWA: 980 mg/m ³ STEL: 1225 mg/m ³ STEL: 500 ppm

Engineering Measures

Showers. Eyewash Stations. Ventilation Systems

Personal Protective Equipment

Eye & Face Protection

No special equipment required

Skin & Body Protection

Protective gloves

Respiratory Protection

If exposure limits are exceeded or irritation is experienced. NIOSH/MSHA approved respiratory protection should be worn. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance White solid
Odor Mild alcohol scent
Odor Threshold no information available
Physical State Solid. Solid containing liquid. Moist paper.
pH 7*
Flash Point (°F) – Closed Cup 91°
Auto-ignition Temperature no information available
Decomposition Temperature no information available
Boiling Point no information available
Melting Point no information available
Flammability Limits in Air no information available
Explosion Limits no information available
Water Solubility no information available
Solubility Soluble*
Evaporation Rate no information available
Vapor Pressure no information available
Vapor Density no information available
Specific Gravity (@20°C) 0.97*
VOC Content <20%*

* tested using liquid component of towelette

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10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Incompatible Products	Strong oxidizing agents. Acids. Chlorinated compounds
Conditions to Avoid	Heat. Flames. Sparks
Hazardous Byproducts of Decomposition	Carbon Oxides
Hazardous Reactions	Hazardous polymerization does not occur
Hazardous Polymerization	Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Chemical Name	LD50 Oral	LD50 Dermal	LD50 Inhalation
Water	90 mL/kg (Rat)		
Isopropyl Alcohol	4396 mg/kg (Rat)	12800 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat) 4h

Chronic Toxicity

Chronic Toxicity Avoid repeated exposure. Contains a known or suspected reproductive toxin.

Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
none				

Target Organ Effects

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated. Ecotoxicity effects of component substances follows:

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Isopropyl Alcohol	EC50 > 1000mg/L 72h EC50 > 1000mg/L 96h	LC50=61200 mg/L Pimephales promelas 96h LC50=94900 mg/L Pimephales promelas 96h LC50=9640 mg/L Pimephales promelas 96h	EC50 > 35390 mg/L 5 min.	EC50 = 13299 mg/L 48h

Chemical Name	Log Pow
Isopropyl Alcohol	=0.05 25A°C

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13. WASTE DISPOSAL

Waste Disposal Methods

This material as supplied is not a hazardous waste according to 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. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Materials

Dispose of in accordance with local regulations.

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
Isopropyl Alcohol	Toxic. Ignitable.

14. TRANSPORTATION

DOT not regulated

TDG not regulated

MEX not regulated

ICAO not regulated

IATA not regulated

IMDG/IMO not regulated

RID not regulated

ADR not regulated

ADN not regulated

15. REGULATORY INFORMATION

International Inventories

TSC Complies

DSL Does not comply

EINECS/ELINCS Does not comply

ENCS Does not comply

IECSC Does not comply

KECL Does not comply

PICCS Does not comply

AICS Does not comply

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U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following 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.	% by Weight	SARA 313 - Threshold Values
Isopropyl Alcohol	67-63-0	10-30	% 1.0

SARA 313 / 312 Hazard Categories

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

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).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Isopropyl Alcohol				X

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

This product contains the following substances which are listed hazardous air pollutants (HAPs) under Sec. 112 of the Clean Air Act.

Chemical Name	CAS No.	% by Weight	HAPs Data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
none						

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.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	MA	NJ	PA	IL	RI	
Isopropyl Alcohol	X	X	X		X	

International Regulations

Mexico – Grade

Moderate risk – Grade 2

Chemical Name	Carcinogen Status	Exposure Limits
Isopropyl Alcohol		Mexico: TWA=26ppm Mexico: TWA=120 mg/m ³ Mexico: STEL=360 mg/m ³ Mexico: STEL=75ppm

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Canada

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

WHMIS Hazard Class

B3 Combustible Liquid

D2B Toxic materials



Chemical Name	National Pollutant Release Inventory
Isopropyl Alcohol	X

16. OTHER INFORMATION

Date of Issue

10 June 2011

Revision date

Revision Note

Hazards and Emergency Overview

Combustible material.
May be harmful or fatal if swallowed, inhaled or absorbed through skin.
Irritating to eyes.
Vapors may be irritating to eyes, nose, throat and lungs.
May cause central nervous system depression.
May cause adverse kidney effects.
May cause adverse liver effects
Contains a known or suspected reproductive toxin.

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, release and disposal, and is not to be considered as a warranty or quality specification. The information related 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 of this MSDS.

* * * END OF MATERIAL SAFETY DATA SHEET * * *