

MATERIAL SAFETY DATA SHEET

PRODUCT: LCT

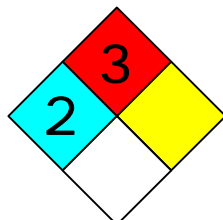
Issue Date: 30 Jan 2009

Revision Date: 14 October 2011

Revision Number: 5

Ratings relate to the solution with which the towelettes are treated only, and in industrial quantities. The towelettes are consumer quantities below MSDS reporting thresholds.

NFPA



HMIS

Health Hazard	2
Fire Hazard	3
Reactivity	0

PPE



Transport Symbol

1. PRODUCT AND COMPANY IDENTIFICATION

NOTE: This MSDS relates to the solution with which the towelettes are treated, and not with the towelette as a whole. Total solution per towelette is 1.2 ml to 1.3 ml per towelette. These are consumer quantities below MSDS reporting thresholds.

Product Name: Lens Cleaning Towelette
Product Number(s): LCT

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

Vapor may cause irritation.

Skin

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

Inhalation

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.

Ingestion

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

Chemical Name	CAS No.	% by Weight
Water	773-18-5	60-85
Isopropyl Alcohol	67-63-0	10-30
2-butoxyethanol	111-76-2	<10
Anti-Fog	56-81-5	<1
Anti-Stat	68391-01-5	<1

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	Flammable material.			
Flash Point	Not available			
Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
Uniform Fire Code	- Irritant: Liquid - Flammable Liquid III-B			
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				
NFPA	Health Hazard: 2	Flammability: 3	Stability: 0	Physical & Chemical Hazards:

6. ACCIDENTAL RELEASE & SPILL MEASURES

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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.

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
2-butoxyethanol	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ Skin	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³

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 54 F (solution only)
Auto-ignition Temperature no information available
Decomposition Temperature no information available

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Boiling Pointno information available
Melting Pointno information available
Flammability Limits in Airno information available
Explosion Limitsno information available
Water Solubilityno information available
Solubilityno information available
Evaporation Rateno information available
Vapor Pressureno information available
Vapor Densityno information available
Specific Gravity (@20°C)no information available
VOC Contentno information available

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 May be harmful by inhalation, ingestion or skin absorption

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
2-butoxyethanol	470 mg/kg (Rat)	220 mg/kg (Rat) 2270 mg/kg (Rabbit)	2.21 mg/L (Rat) 4h 450 ppm (rat) 4h

Chronic Toxicity

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

Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
2-butoxyethanol	A3			

ACGIH: American Conference of Governmental Industrial Hygienists)
A3: Animal Carcinogen

Target Organ Effects Blood, Central Nervous System (CNS), Eyes, Hematopoetic System, Kidney, Liver, Respiratory System, Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

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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
2-butoxyethanol		LC50=1490 mg/L Lepomis macrochirus 96h		LC50 1698-1940 mg/L 24h EC50 = 1720 mg/L 24h

Chemical Name	Log Pow
Isopropyl Alcohol	=0.05 25A°C
2-butoxyethanol	=0.81 25A°C

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

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U.S. State Right-to-Know Regulations

Chemical Name	MA	NJ	PA	IL	RI
Isopropyl Alcohol	X	X	X		X
2-butoxyethanol	X	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
2-butoxyethanol		Mexico: TWA=400ppm Mexico: TWA=980 mg/m ³ Mexico: STEL=1225 mg/m ³ Mexico: STEL=500ppm

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 (of solution with which the towelette is treated only)

B2 Flammable Liquid
D2B Toxic materials



Chemical Name	National Pollutant Release Inventory
Isopropyl Alcohol	X
Supplier Trade Secret	X

16. OTHER INFORMATION

Date of Issue 30 January 2009

Revision date: (R5) 14 October 2011

Revision Note: notes regarding hazards relating to liquid towelette solution, not towelettes as a whole.

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Hazards and Emergency Overview

Flammable 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 effects on the bone marrow and blood forming system

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 * * *