

Safety Data Sheet

Issue Date: 18-Jul-2006 Revision Date: 18-Jul-2014 Version 1

1. IDENTIFICATION

Product Identifier

Product Name Leader Liquid Lens Cleaner

Other means of identification

SDS # HLC-001

Product Numbers GALSOL, LCB16, LCS10, LCS20

Recommended use of the chemical and restrictions on use

Recommended Use Eyeglass lens cleaner.

2. HAZARDS IDENTIFICATION

Appearance Clear, pale pink or pale blue Physical State Liquid Odor Mild citrus

liquid

Classification

The information below is for the liquid in industrial quantities when used in an industrial setting. The solution as packed in a consumer quantity is considered a consumer good and when used as intended is unlikely to present a hazard

Hazards Not Otherwise Classified (HNOC)

Causes mild skin irritation

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Ethylene Glycol Monobutyl Ether	111-76-2	5-15

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

Skin Contact Wash with soap and water.

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Inhalation Remove to fresh air.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects

Symptoms Causes mild skin irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

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 Avoid contact with skin, eyes or clothing.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin and eyes. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

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Incompatible Materials

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylene Glycol Monobutyl Ether	TWA: 20 ppm	TWA: 50 ppm	IDLH: 700 ppm
111-76-2		TWA: 240 mg/m ³	TWA: 5 ppm
		(vacated) TWA: 25 ppm	TWA: 24 mg/m ³
		(vacated) TWA: 120 mg/m ³	
		(vacated) S*	
		S*	

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes.

Skin and Body Protection Wear suitable protective clothing.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid

AppearanceClear, pale pink or pale blue liquidOdorMild citrusColorClear, pale pink or pale blueOdor ThresholdNot determined

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 7

Melting Point/Freezing Point Not determined Boiling Point/Boiling Range 100 °C / 210 °F Flash Point Not determined **Evaporation Rate** Not determined Flammability (Solid, Gas) Not determined **Upper Flammability Limits** Not determined **Lower Flammability Limit** Not determined **Vapor Pressure** Not determined

Vapor Density 1.3 Specific Gravity 1.010

Water Solubility
Soluble in water
Solubility in other solvents
Partition Coefficient
Auto-ignition Temperature
Soluble in water
Not determined
Not determined

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Decomposition TemperatureNot determinedKinematic ViscosityNot determinedDynamic ViscosityNot determinedExplosive PropertiesNot determinedOxidizing PropertiesNot determined

VOC Content 5.09

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Causes mild skin irritation.

Inhalation Do not inhale.

Ingestion Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethylene Glycol Monobutyl Ether	= 470 mg/kg (Rat)	= 2270 mg/kg (Rat) = 220 mg/kg (= 2.21 mg/L (Rat) 4 h = 450 ppm
111-76-2		Rabbit)	(Rat) 4 h
Sodium Bicarbonate	= 4220 mg/kg (Rat)	-	-
144-55-8			

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

Group 3 IARC components are "not classifiable as human carcinogens".

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Chemical Name	ACGIH	IARC	NTP	OSHA
Ethylene Glycol Monobutyl	A3	Group 3		
Ether				
111-76-2				

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Ethylene Glycol Monobutyl		1490: 96 h Lepomis		1698 - 1940: 24 h Daphnia
Ether		macrochirus mg/L LC50		magna mg/L EC50 1000: 48
111-76-2		static 2950: 96 h Lepomis		h Daphnia magna mg/L
		macrochirus mg/L LC50		EC50
Sodium Bicarbonate	650: 120 h Nitzschia linearis	8250 - 9000: 96 h Lepomis		2350: 48 h Daphnia magna
144-55-8	mg/L EC50	macrochirus mg/L LC50		mg/L EC50
		static		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Ethylene Glycol Monobutyl Ether	0.81
111-76-2	

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

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DOT Not regulated

IATA Not regulated

<u>IMDG</u> Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL Does not comply **NDSL** Does not comply **EINECS** Does not comply **ELINCS** Does not comply **ENCS** Does not comply **IECSC** Does not comply **KECL** Does not comply **PICCS** Does not comply **AICS** Does not comply

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

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ethylene Glycol Monobutyl Ether - 111-76-2	111-76-2	5-15	1.0

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethylene Glycol Monobutyl Ether	X	X	X
111-76-2			

16. OTHER INFORMATION

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NFPAHealth HazardsFlammabilityInstabilitySpecial Hazards100Not determinedHMISHealth HazardsFlammabilityPhysical HazardsPersonal Protection10Not determined

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Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet