

MATERIAL SAFETY DATA SHEET

Section 1: Name of Chemical & Supplier Contact Details

Identity: ***HEAVY DUTY FORMULA: Visionaid Rainbow ®, Visionaid Raianbow II®***

Company Product Code: 1LCL211BHD, 1LCL211EHD, 1LCL2112HD, 1LCL211CHD,
1LC1776DUHD, 1LC5000HD, 1LC3000DHD, 1LC382DHD

Sizes: 3.8L (128 fl. oz.), 473 ml (16fl. oz.), 103 ml (3.5 fl. oz.) 59ml (2 fl. oz.)

Product Use: Lens Cleaner

Supplier: VisionAid, Inc.
11 Kendrick Rd,
Wareham, MA 02571

Information Phone: 1-800-426-1881 (Business Hours)
Fax: 1-508-295-3521
Emergency Phone: 1-800-268-9017 (Poison Information Center)

Date Prepared: January 15, 1997

Revised Date: Jan 2014

Prepared By: VisionAid, Inc.

Section 2: Composition / Information on Ingredients

Components (Chemical Names & Common Names) (Hazardous Components 1% or greater, Carcinogens 0.1% or greater)	CAS #S	%	OSHA	ACGIH	OTHER
Isopropanol	67-63-0	10			
Sodium Dodecyl Sulphate	151-21-3	2.5			
Hydrogen Hydroxide	7732-18-5	87.5			
Polyalkyleneoxide Modified Heptamethyltri-Siloxane	27306-78-1	3			
Pylaklor Turquoise Blue S-400	N/A Mixture	.0036			

Section 3: Hazards Identification

Eye Contact: Flush with plenty of water for at least fifteen minutes. If irritation persists, consult a physician

Repeated Exposure Severity, Target Organs & Type of Effect: Corneal thickening leading to scarring from repeated eye contact.

Skin Contact: May cause mild irritations, drying out of skin. Wash thoroughly with soap and water.

Inhalation: Move to fresh air. If dizziness persists, consult physician.

Ingestion: May cause stomach discomfort if ingested. Induce vomiting, drink 2 glasses of water Seek Medical advice.

Section 4: First Aid Measures

Inhalation

Single Exposure Severity, Target Organs & Type of Effect: High levels may cause headache, nausea, and dizziness. No long-term effects expected.

Ingestion

Single Exposure Severity, Target Organs & Type of Effect: Mildly toxic by ingestion. May cause nausea, headache and vomiting. No long-term effects expected

Skin Absorption

Single Exposure Severity, Target Organs & Type of Effect: May cause mild irritation and dryness to skin

Section 5: Fire Fighting Measures

Flammability Classification (29 CFR 1910.1200) Combustible Liquid.

Flash Point and Method: 82° C (180°F)

Flammable Limits in Air – 2.5%-12.0% (Isopropanol)

Auto Flammability and Auto-ignition Temperature: 456°C (825°F) (Isopropanol)

Section 6: Accidental Release Measures

Containment Technique: Prevent from entering waterways and storm sewers.

Clean-UP Technique: Contain spill. Cover spill with inert absorbent (absorbent, vermiculate). Using non-sparking tools, shovel or sweep up into a clean container. Remove from area. Flush spill area with water.

Evacuation Procedures: Follow normal Emergency Response Plan (ERP)

Section 7: Handling and Storage

Handling Practices: Use grounding wires if transferring large quantities. Keep away from oxidizers, heat and other ignition sources. Do not allow to freeze.

Conditions for Storage: Keep away from oxidizers, heat and other ignition sources. Do not store in direct sunlight. Store in cool, dry well-ventilated area. Do not allow to freeze.

Ventilation Requirements For Storage: None required

Storage Temperature: Below 40°C (104°F)

Storage Humidity Range: Not applicable

Quantity Limits for Safe Storage: Not applicable

Special Materials to be used for Packaging or Containers: Not applicable

Section 8: Exposure Controls / Personal Protection

Respiratory Protection (Specify Type): None

Hygiene Recommendations to Prevent Continued Exposure: Use normal good industrial hygiene practices

Protection Gloves: None required for normal use

Eye Protection: None required for normal use

Ventilation to be Used: N/A

Local Exhaust: N/A

Special: N/A

Mechanical (General): N/A

Other: N/A

Other Protective Equipment: Not Required

Hygienic Work Practices: Always read the label before use.

Section 9: Physical and Chemical Properties

Physical State: Liquid	Specific Gravity (H ₂ O=1) 1.00
PH Factor: N/A	Freezing Point: -6°C (21°F)
Boiling Point: 93°C (200°F)	Melting Point: : -6°C (21°F)
Vapor Pressure 20 mmHg at 20°C (68°F)	Evaporation Rate: 0.99
Vapor Density 1	Water Reactive: None
Solubility in Water: 100%	Specific Gravity (Relative Density): 98
Percent Volatile: 10%	

Appearance and Odor: Clear blue solution. Slight alcoholic odor

Section 10: Stability and Reactivity

Stability: Unstable: No Stable: Yes
Conditions to Avoid: High temperatures, flame and other ignition sources
Incompatibility (materials to avoid): Strong oxides of carbon
Hazardous Decomposition Products: Oxides of carbon (CO_x)
Significance of Change in Physical Appearance: Under severely cold temperatures product may begin to turn cloudy which may degrade its functionality.
Conditions of Reactivity: Do not heat above 80°C (176°F)

Section 11: Toxicological Information

Eyes: If splashed in eyes may cause slight irritation
Skin: Prolonged use may cause mild irritations, drying out skin
Inhalation: Irritant – No long term effects expected
Ingestion: Irritant – Mildly toxic by ingestion, may cause nausea, headache & vomiting

Section 12: Ecological Information

ECOTOXICITY

Acute and Long Term Toxicity to Fish and Invertebrates: Solutions of alcohols. Are toxic to aquatic life at moderate to low concentrations. No long-term ecological effects are likely.

Toxicity to Aquatic and Terrestrial Plants: Concentrated solutions of alcohols and surfactants may cause damage to aquatic and terrestrial plants.

Acute and Dietary Toxicity to Birds: Not expected to be toxic.

Toxicity to Beneficial Microorganisms: Concentrated solutions of alcohols and surfactants have antimicrobial activity.

ENVIRONMENTAL FATE

Persistence and degradation: Moderately persistent but is biodegradable over time.

Bioaccumulation/Bioconcentration: Will not bioaccumulate

Soil Mobility: Similar to water.

Section 13: Disposal Considerations

Please note: The advice in this section is given in accordance with the laws that were in effect at the time. Laws are transient and may change or be reinterpreted. State/Provincial or Local regulations are complex and may differ from Federal regulations. This information applies to the material as manufactured: processing, use or contamination may make the information inappropriate, inaccurate or incomplete. These regulations may also apply to empty containers, liners, and rinsate. Remember that the responsibility for proper waste disposal lies with the owner of the waste. See Section 15 Regulatory Information for additional regulations.

Classification Under Applicable Laws: RCRA: Not listed

Identification: Not listed

Waste Disposal Method: Incinerate in an approved incinerator, or landfill. Consult Local Regulations

Disposal of Packaging: No restrictions.

Safe Handling of Residues: Not Required

Can Packaging be Incinerated: YES in an approved incinerator

Can Packaging be Recycled: YES triple rinsed containers may be recycled

Can Packaging be Landfilled: YES

Section 14: Transportation Information

Special Shipping Instructions and Precautions- Within Premises:	Not Regulated
Special Shipping Instructions and Precautions- Off Premises	Not Regulated
DOT Classification/Description:	Not Regulated
TDG Classification /Description:	Not Regulated
Classification/Description under International Transportation Regulations:	Not Regulated

Section 15: Regulatory Information

US FEDERAL REGULATIONS

OSHA:	This product is classified as an Eye and Skin Irritant under OSHA Standard classification system.
TSCA (Toxic Substances Control Act)	Ingredients of this product are on the US TSCA Export Notification: Isopropanol Export Notification Required

FIFRA (Federal Insecticide Fungicide, and Rodenticide Act)	Not applicable
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CERCLA: (Comprehensive Environmental Response Compensation, And Liability Act)	Not Listed
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EPCRA: (SARA Title III[Superfund Amendments and Reauthorization])	Not Listed
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CAA (Clean Air Act) :	Not Listed
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CWA (Clean Water Act):	Not Listed
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FDA/USDA (Food and Drug Act):	Not applicable
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NFPA (National Fire Protection Association)	NFPA Classification Fire=1 (Slightly Flammable), Health=1 (Slightly Hazardous) Reactivity=0 (Stable)
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CANADIAN REGULATIONS

WHMIS (Workplace Hazardous Materials Information System)	WHMIS Class B3 – Combustible Liquid WHMIS Class D2B – Toxic: Eye/Skin Irritant.
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CEPA (Canadian Environmental Protection Act)/ DSL (Domestic Substances List)	All ingredients of this product are on the Canadian DSL as required by CEPA
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INTERNATIONAL REGULATIONS	
EUROPE:	European Inventory of Existing Commercial Chemical Substances (EINECS) Council Directive 67/548/EEC of June 1967 as amended by Directive 79/831/EEC
UNITED KINGDOM:	Health and Safety Executive (HSE) Occupational Exposure Standards (OESs) 1992 Time weighted average: 400 ppm TWA; 980 mg/m ³ TWA Short time exposure limit: 500 ppm STEL; 1225mg/m ³ STEL Skin Absorption/Sensitization: can be absorbed through the skin Listed in United Kingdom OESs: [Propan-2-ol]
JAPAN:	Chemical Substance Control Law (MITI)
AUSTRALIA:	This information applies to Isopropanol only: National Occupational Health and Safety Commission (NOHSC) Exposure Standards for Atmospheric Contaminants in the Occupational Environmental-1991 Time weighted average/Peak Limitation: 400 ppm TWA; 983 mg/m ³ TWA Short time exposure limit: 500 ppm STEL; 1230 mg/m ³ STEL Exposure standard under review: exposure limits under review.
GERMANY:	This information applies to Isopropanol only. Duetsche Forschungshemeinschaft (DFG) Maximum Concentrations at the Workplace (MAK) and Biological Tolerance Values for Working Materials (BAT)1993 MAK Value: 400 ppm MAK; 980 mg/m ³ MAK Peak Limitation: 2x normal MAK (30 min. average value); don't exceed 4 times during shift Embryotoxicity/Fetotoxicity: classification not yet possible.
ISREAL:	This information applies to Isopropanol only: Occupational Exposure Limits for Chemical Substances 1990 Time Weighted average: 400 ppm TWA; 983 mg/m ³ TWA Short time exposure limit: 500 ppm STEL; 1230 mg/m ³ STEL Action Level: 200 ppm AL; 491.5 mg/m ³ AL
MEXICO:	This information applies to Isopropanol only: Secretariat of Labour and Social Welfare Instruction No 10 Permissible Concentrations-1992 Time Weighted average: 400 ppm TWA; 980 mg/m ³ TWA {new} Short time exposure limit: 500 ppm STEL; 1225 mg/m ³ STEL {new} Skin Designation: skin-potential for cutaneous absorption {new}
OTHER INTERNATIONAL REGULATIONS:	Not Available

Section 16: Other Information

<u>Revisions</u> (Give date and Specify Changes)	Not applicable – first release
<u>Hazard Ratings:</u>	HMIS Classification: Fire=1(slightly flammable), Health=1 (slightly hazardous), Reactivity=0 (stable), Personal Protection = b
<u>Training Requirements:</u>	Workplace Hazardous Materials Information System training is required for handling and using this product in Canadian Workplaces. US OSHA requirements for handling chemical substances must be in place for handling and using this product in the United States.
<u>Recommended Uses and Restrictions</u>	Cleaning of clear surfaces. Check for compatibility with material to be cleaned prior to use.
<u>Additional Information</u>	Keep out of reach of children.
<u>Disclaimer</u>	This information is furnished without warranty, representation, or license of any kind, except that it is accurate to the best of VisionAid, Inc.'s knowledge, or obtained from sources believed to be accurate. VisionAid, Inc. does not assume any legal responsibility for use or reliance upon the same. Customers are encouraged to conduct their own tests and investigations. Before using the product, please read and understand the label and Material Safety Data Sheet.
<u>References</u>	<ol style="list-style-type: none">1. The References Respecting the Control of Biological and Chemical Agents made under Occupational Health and Safety Act, Ont. Reg. 654/86.2. International Agency for Research on Cancer, Monographs Evaluation for Carcinogenic Risk in Humans.3. Text entitled "Dangerous Properties of Industrial Chemicals" by Sax, N.I.4. The "Documentation of the threshold Limit Values and Biological Exposure Indices" by the American Conference of Governmental Industrial Hygienists.5. The Merk Index, An Encyclopedia of Chemicals6. The CCINFO System, Canadian Centre of Occupational Health and Safety.7. RTECS database by the US National Institute of Occupational Safety and Health8. New Jersey Department of Health Hazardous Substances Fact Sheet.9. Canadian Environmental Protection Act, New Substances Notification Regulations-Domestic Substances List10. Original Supplier MSDS.

Other Related Manufacturer's Brochures	Not Available
<u>Key/Legend</u>	<p>Not available- means that the information for that field could not be obtained.</p> <p>Not applicable – means that the field in question does not pertain to this particular product due to the inherent nature of the product.</p>

Product Label

