

# MATERIAL SAFETY DATA SHEET

## Section 1: Name of Chemical & Supplier Contact Details

Identity: Visionaid Rainbow®, Visionaid Rainbow II®

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:** Pakex UK Plc  
1 Prime Point,  
Welwyn Garden City,  
Hertfordshire, AL7 1FE

Information Phone: 01707 384858

Fax: 01707 332838

Emergency Phone: 1-800-268-9017 (Poison Information Center)

## 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			
Pylaklor Turquoise Blue S-400	N/A Mixture	.0036			

## Section 3: Hazards Identification

### 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 4: First Aid Measures

**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 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

**Eye Protection:** Safety Glasses

**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 <sub>2</sub> 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<sub>x</sub>)

**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:** Irritant with danger of eye injury – May irritate eyes

**Skin:** Irritant – 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

### SYMBOLS:



TOXIC

<p>FLAMMABLE Low FlashPoint (no symbol)</p>
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R-PHRASES:	R22	Harmful if Swallowed
	R36	Irritating to Eyes
S-PHRASES:	S2	Keep out of reach of children
	S13	Keep away from food, drink and animal feeding stuff
	S15	Keep away from heat
	S25	Avoid contact with eyes
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advise
	S46	If swallowed, seek medical advise immediately and show this container of label

## US FEDERAL REGULATIONS

<b>OSHA:</b>	This product is classified as an Eye and Skin Irritant under OSHA Standard classification system.
<b>TSCA</b> (Toxic Substances Control Act)	Ingredients of this product are on the US TSCA Export Notification: Isopropanol Export Notification Required
<b>FIFRA</b> (Federal Insecticide Fungicide, and Rodenticide Act)	Not applicable
<b>CERCLA:</b> (Comprehensive Environmental Response Compensation, And Liability Act)	Not Listed
<b>EPCRA:</b> (SARA Title III[Superfund Not Listed Amendments and Reauthorization])	
<b>CAA</b> (Clean Air Act) :	Not Listed
<b>CWA</b> (Clean Water Act):	Not Listed
<b>FDA/USDA</b> (Food and Drug Act):	Not applicable
<b>NFPA</b> (National Fire Protection Association)	NFPA Classification Fire=1 (Slightly Flammable), Health=1 (Slightly Hazardous) Reactivity=0 (Stable)

## CANADIAN REGULATIONS

<b>WHMIS</b> (Workplace Hazardous Materials Information System)	WHMIS Class B3 – Combustible Liquid WHMIS Class D2B – Toxic: Eye/Skin Irritant.
<b>CEPA</b> (Canadian Environmental Protection Act)/ DSL (Domestic Substances List)	All ingredients of this product are on the Canadian DSL as required by CEPA

## INTERNATIONAL REGULATIONS

<b>EUROPE:</b>	European Inventory of Existing Commercial Chemical Substances (EINECS) Council Directive 67/548/EEC of June 1967 as amended by Directive 79/831/EEC
<b>UNITED KINGDOM:</b>	Health and Safety Executive (HSE) Occupational Exposure Standards (OESs) 1992 Time weighted average: 400 ppm TWA; 980 mg/m <sup>3</sup> TWA Short time exposure limit: 500 ppm STEL; 1225mg/m <sup>3</sup> STEL Skin Absorption/Sensitization: can be absorbed through the skin Listed in United Kingdom OESs: [Propan-2-ol]
<b>JAPAN:</b>	Chemical Substance Control Law (MITI)
<b>AUSTRALIA:</b>	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 <sup>3</sup> TWA Short time exposure limit: 500 ppm STEL; 1230 mg/m <sup>3</sup> STEL Exposure standard under review: exposure limits under review.
<b>GERMANY:</b>	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 <sup>3</sup> MAK Peak Limitation: 2x normal MAK (30 min. average value); don't exceed 4 times during shift Embryotixicity/Fetotoxicity: classification net yet possible.
<b>ISREAL:</b>	This information applies to Isopropanol only: Occupational Exposure Limits for Chemical Substances 1990 Time Weighted average: 400 ppm TWA; 983 mg/m <sup>3</sup> TWA Short time exposure limit: 500 ppm STEL; 1230 mg/m <sup>3</sup> STEL Action Level: 200 ppm AL; 491.5 mg/m <sup>3</sup> AL
<b>MEXICO:</b>	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 <sup>3</sup> TWA {new} Short time exposure limit: 500 ppm STEL; 1225 mg/m <sup>3</sup> STEL {new} Skin Designation: skin-potential for cutaneous absorption {new}
<b>OTHER INTERNATIONAL REGULATIONS:</b>	Not Available

## Section 16: Other Information

### Revisions

(Give date and Specify Changes)

Not applicable – first release

### Hazard Ratings:

HMIS Classification: Fire=1 (slightly flammable), Health=1 (slightly hazardous), Reactivity=0 (stable), Personal Protection = b

### Training Requirements:

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.

### Recommended Uses and Restrictions

Cleaning of clear surfaces. Check for compatibility with material to be cleaned prior to use.

### Additional Information

Keep out of reach of children.

### Disclaimer

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### References

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 Chemicals
6. The CCINFO System, Canadian Centre of Occupational Health and Safety.
7. RTECS database by the US National Institute of Occupational Safety and Health
8. New Jersey Department of Health Hazardous Substances Fact Sheet.
9. Canadian Environmental Protection Act, New Substances Notification Regulations-Domestic Substances List
10. Original Supplier MSDS.

**Other Related  
Manufacturer's Brochures**

Not Available

**Key/Legend**

Not available- means that the information for that field could not be obtained.

Not applicable – means that the field in question does not pertain to this particular product due to the inherent nature of the product.

Product Label

