SAFETY DATA SHEET

1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name: PRO-CC-AQ **Fiber Optic Cleaner**

Product ID numbers: PRO-CC-AQ

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: Water-based cleaning solution, no residue for precision cleaning.

List of advices against: Not applicable.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:

Precision Rated Optics

9999 Hamilton Blvd, Ste 220 Breinigsville, PA 18031 Tel: 888-545-1254 Email: sales@precisionratedoptics.com

1.4 Emergency telephone numbers

INFOTRAC 1-352-323-3500 (USA)

2. Hazards Identification

2.1 Classification of the				
Classification accord	•	FR 1910.1200 a	and Regulation (EC) NO 1272/2008.
Skin Irritation: Skin Irri				
Flammable: Flam Liq	4 H227			
2.2 Label elements				
Contains: 1-Butoxy-2	2-propanol, Isopropa	anol		
Pictograms:	None required.			
Signal Word:	Warning			
Hazard Statements:				
H316	Causes mild skin	irritation.		
H227	Combustible liquid.			
Precautionary Stater	nents:			
P210	Keep away from	flames and hot	surfaces. No sm	oking.
P280	Wear protective	gloves.		
P332+P313	If skin irritation of	ccurs: Get medi	cal attention.	
P403 + P235	Store in a well-ventilated place. Keep cool.			
P501	Dispose of contents/container in accordance with local regulations.			
2.3 Other hazards:	No information a	vailable.		
3. Composition/Informa	tion on Ingredient	S		
Component	CAS #	EC #	Wt. %	GHS/CLP Classification

Component 1-Butoxy-2-propanol

Eye Irrit 2 H319

Dipropylene glycol monomethyl ether	34590-94-8	252-104-2	1 - 5	
Isopropanol	67-63-0	200-661-7	<1	Flam Liq 2 H225 Eye Irrit 2 H319 STOT SE 3 H336

4. First Aid Measures

4.1 Description of first aid measures

 Eye Contact:
 Flush eyes with a large quantity of water for 15 minutes. If irritation continues, seek medical attention.

 State Contact:
 If irritation continues, seek medical attention.

Skin Contact: If skin irritation occurs, get medical attention.

Inhalation (Breathing): No first aid expected to be required. Not an inhalation hazard.

Ingestion (Swallowing): Rinse mouth. If discomfort continues, seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Aside from information above, no additional symptoms and effects are anticipated.

4.3 Indication of immediate medical attention and special treatment needed.

No information available.

5. Firefighting Measures

5.1 Extinguishing media:

Does not apply.

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition and by-products:

High temperature steam, potentially carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Sealed container can build up pressure when exposed to high heat. Cool containers with water.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid contact with eyes and skin.

6.2 Environmental precautions:

Outside spills unlikely. Absorb with sand or absorbents.

6.3 Methods materials for containment and cleaning up:

Flush small spills to drain with water.

6.4 Reference to other sections:

Refer to Sections 4, 5, 8, and 13 for more information.

7. Handling and Storage

7.1 Precautions for safe handling

Avoid unnecessary contact.

7.2 Conditions for safe storage, including incompatibilities

Keep product containers closed when not in use.

7.3 Specific end uses

See product flyer for further information.

8. Exposure Controls / Personal Protection

8.1 Control parameters

Exposure limits and recommendations:

Component Name	Limit	Standard	Source/Note
1-Butoxy-2-propanol	50 ppm	Manufacturer Recommendation	
Dipropylene glycol monomethyl ether	600 mg/m ³	OSHA PEL	
Dipropylene glycol monomethyl ether	100 ppm	ACGIH TLV	
Isopropanol	400 ppm	OSHA PEL	
Isopropanol	200 ppm	ACGIH TLV	
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8.2 Exposure controls

Respiratory protection:

Normal ventilation is adequate.

Protective gloves:

For people with pre-existing skin conditions such as dermatitis the use of impermeable gloves is recommended. **Eye protection:**

Eye protection is recommended, especially if the material is used in ways where it could contact the eyes.

9. Physical and Chemical

9.1 Information of basic physical and chemical properties

Appearance:	Clear liquid
Odor threshold:	Not available
pH:	Neutral
Freezing point:	~ 32°F (0°C)
Boiling point:	~ 212°F (100°C)
Flash point:	145 °F (63 °C) PMCC
Evaporation rate:	Like water
Flammability (solid, gas):	Not available
Upper/lower flammability or	
explosive limits:	Not available
Vapor pressure:	Not available
Vapor density (Air = 1):	Not available
Specific gravity (H ₂ O = 1):	0.99
Solubility in water:	Complete
Partition coefficient: n-	
octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
9.2 Other Information	
Volatiles (Weight %):	100%
VOC Content:	60.4 g/l

10. Stability and Reactivity

10.1 Reactivity:

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability:

Stable

10.3 Possibility of hazardous reactions:

None known.

10.4 Conditions to avoid:

None known.

10.5 Incompatible materials :

Strong oxidizing agents, strong acids.

10.6 Hazardous decomposition products:

Carbon dioxide, carbon monoxide.

<i>,</i>		
11. Toxicological Information		
11.1 Information on toxicologica Acute toxicity	al effects:	
Eye contact:		
Direct eye contact may cause Skin contact:	eye irritation. Th	is irritation is minimal and expected to be transient.
••••••••••••	tion notontial T	
Irritation and Sensitization P	•	nere is no dermal toxicity hazard.
This product has low skin irrita	tion potential. It	is not a sensilizer.
Inhalation (Breathing):	with water yes	_
No inhalation hazard expected	with water vapo	ſ.
Ingestion:	vicity	
Material has low level of oral to	xicity.	
Toxicity to Animals 1-Butoxy-2-propanol LD ₅₀ (oral rat) 2,124-5,500 mg/kg		LD ₅₀ (oral rat) 2,124-5,500 mg/kg
Dipropylene glycol monomethyl ether		$LD_{50} \text{ (oral rat) } 2,124 \text{ o,000 mg/kg}$ $LD_{50} \text{ (oral rat) } >2,000 \text{ mg/kg}$ $LD_{50} \text{ (oral rat) } >5,000 \text{ mg/kg}$ $LD_{50} \text{ (dermal rabbit) } 9,510 \text{ mg/kg}$ $LC_{50} \text{ (inhl rat) } 3.35 \text{ mg/l}, 7 \text{ hours}$
Isopropanol		LD_{50} (oral rat) 3,600 mg/kg LD_{50} (dermal rabbit) 12,800 mg/kg LC_{50} (inhl rat) 16,000 ppm, 8 hours
Aspiration hazard		
Not an aspiration hazard.		
Chronic Exposure:		
Reproductive Toxicity:	Not Available	
Mutagenicity:	Not Available	
Teratogenicity:	Not Available	
Toxicologically Synergistic Products:	Not Available	
Carcinogenic Status:		has not been identified as a carcinogen or probable NTP, IARC, or OSHA, nor have any of its components.

12. Ecological Information

12.1 Ecotoxicity 1-Butoxy-2-propanol

Dipropylene glycol monomethyl ether Isopropanol	$ \begin{array}{llllllllllllllllllllllllllllllllllll$
	EC ₅₀ 96 h Daphnia magna >1,000 mg/l
12.2 Persistence and degradability:	No information available.
12.3 Bioaccumulation potential:	No information available
12.4 Mobility in soil:	No information available.
12.5 Results of PBT and vPvB Assessment:	This product is not, nor does it contain a substance that is a PBT or vPvB.
12.6 Other adverse effects:	None known.

13. Disposal Considerations

Dispose of product in accordance with National and Local Regulations.

14. Transport Information

UN Number:	Not Listed
UN Proper shipping name:	Not Applicable
Transport hazard class(es):	Not Applicable
Packing group:	Not Applicable
Environmental hazards:	None known
Special precautions:	None known
TDG:	Not Regulated
ICAO/IATA-DGR:	Not Regulated
IMDG:	Not Regulated
ADR/RID:	Not Regulated

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

USA Federal and State

All components are listed on the TSCA inventory.

Hazard Categories for SA		<u>Chronic</u>	<u>Fire</u>	Pressure	Reactive
Section 311/312 Reporting	g No	No	No	No	No
	CERC	LA/SARA Sec	302	SARA	Sec. 313
<u>Components</u>	Hazardous Subst	ance RQ	<u>EHS TPQ</u>	<u>Toxic</u>	<u>Release</u>
Components are not affected by these Superfund regulations.					

NFPA Ratings:	Health:	1
	Fire:	0
	Reactivity:	0

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel during spill, fire or similar emergencies. Hazard ratings are based on physical and toxic properties of combustion or decomposition.

European Union

All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. It does not contain Substances of Very High Concern (SVHC).

Canada

All components are listed on the DSL inventory.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Classification: NC

Australia

All components are listed on the AICS. Not considered hazardous according to criteria of NOHSC Australia.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for the mixture by the supplier.

16. Other Information

Abbreviations and acronyms:

 $\begin{array}{l} \text{OSHA} = \text{Occupational Safety and Health Administration} \\ \text{CLP} = \text{Classification, Labeling and Packaging Regulation} \\ \text{STOT} = \text{Specific Target Organ Toxicity} \\ \text{LD}_{50} = \text{Median Lethal Dose} \\ \text{DNEL} = \text{Derived No Effect Level} \\ \text{ACGIH} = \text{American Conference of Governmental Industrial Hygienists} \\ \text{TSCA} = \text{Toxic Substances Control Act (USA)} \\ \text{DSL} = \text{Domestic Substances List (Canada)} \\ \text{AICS} = \text{Australian Inventory of Chemical Substances} \\ \end{array}$

Hazard Statements:

H316	Causes mild skin irritation.
H227	Combustible liquid.
Revision Date:	December 23, 2014
Revision Number:	5

Revision number.	5
Supersedes:	September 29, 2014
Other:	Not Applicable
Indication of Changes:	Section 1, 2, 15, 16 updated. Addition of acronyms and other formatting changes.
	Updated in accordance with the provisions of OSHA 1910.1200 App D and REACH
	Annex II (EU No 453/2010). (GHS format)

The information and recommendations contained herein are believed to be reliable. However, the supplier makes no warranties, express or implied, concerning the use of this product. The buyer must determine conditions of safe usage and assumes all risk and liability in handling this product.