

Safety Data Sheet

Issue Date: 11-Nov-2011

Revision Date: 18-Jul-2014

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Radnor® 2.5 Ounce Pump Bottle Anti-Fog Treatment System With Buffing Cloth

Other means of identification

SDS # 004162

Product Number RAD64051467

Recommended use of the chemical and restrictions on use

Recommended Use Anti-Fog Lens Treatment.

Details of the supplier of the safety data sheet

Supplier Address

Radnor Products
259 North Radnor - Chester Road
Suite 100
Radnor, PA, 19087-5283

Emergency Telephone Number

Company Phone Number 1-866-734-3438

Emergency Telephone (24 hr) 1-866-734-3438

2. HAZARDS IDENTIFICATION

Appearance Slightly viscous liquid

Physical State Liquid

Odor Sweet Slight alcohol

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

Serious eye damage/eye irritation	Category 2
Flammable Liquids	Category 4

Signal Word

Warning

Hazard Statements

Causes serious eye irritation

Combustible liquid



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Wear eye/face protection
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IN CASE OF FIRE: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown Acute Toxicity

3.12% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Isopropyl Alcohol	67-63-0	10-20

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

General Advice	In case of shortness of breath, give oxygen. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove any contact lenses and open eyes wide apart. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash skin with soap and water. If irritation persists, seek medical attention.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if necessary.
Ingestion	Rinse mouth thoroughly with water. If ingestion of a large amount does occur, call a poison control center immediately.

Most important symptoms and effects

Symptoms	Causes serious eye irritation. May cause drowsiness or dizziness. Prolonged or repeated contact may dry skin and cause irritation. May cause corneal burn. Can cause defatting of skin tissue. Prolonged or repeated skin contact may result in dermatitis (red, dry skin).
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	In case of shortness of breath, give oxygen. Keep victim warm. Symptoms may be delayed.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water. Foam. Dry chemical. Carbon dioxide (CO₂).

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific Hazards Arising from the Chemical

Combustible. During fire, gases hazardous to health may be formed. Solvent vapors may form mixtures with air. Fire may produce irritating and/or toxic gases.

Hazardous Combustion Products Carbon monoxide. Carbon dioxide (CO₂).

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. Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Keep people away from and upwind of spill/leak. Ventilate closed spaces before entering. Wear suitable protective clothing. Avoid inhalation of vapors and contact with skin and eyes. Local authorities should be advised if significant spillages cannot be contained.

Environmental Precautions See Section 12 for additional Ecological Information. Avoid discharge into drains, water courses or onto the ground.

Methods and material for containment and cleaning up

Methods for Containment Eliminate all ignition sources. Prevent entry into waterways, sewer, basements or confined areas.

Methods for Clean-Up Collect with absorbent, non-combustible material in to suitable containers. Clean surface thoroughly to remove residual contamination. Should not be released into the environment. Clean up in accordance with all applicable regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Wash face, hands, and any exposed skin thoroughly after handling. Wear eye/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Avoid contact with skin and eyes. Avoid prolonged exposure.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from freezing. Protect from direct sunlight. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. Store away from incompatible materials.

Incompatible Materials Strong oxidizing agents. Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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Isopropyl Alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³
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Appropriate engineering controls

Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Wear protective gloves.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations Avoid contact with eyes and skin. Keep away from food and drink. 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	Odor	Sweet Slight alcohol
Appearance	Slightly viscous liquid	Odor Threshold	Not available
Color	Clear		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6	
Melting Point/Freezing Point	Not determined	Not available
Boiling Point/Boiling Range	Not available	
Flash Point	60 °C / 140 °F	
Evaporation Rate	Not available	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	Not available	
Vapor Density	Not available	
Specific Gravity	Not available	
Water Solubility	Not miscible	
Solubility in other solvents	Not determined	
Partition Coefficient	Not available	
Auto-ignition Temperature	Not available	
Decomposition Temperature	Not available	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

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**

Heat, flames and sparks. High temperature and sources of ignition. Incompatible Materials.

Incompatible Materials

Strong oxidizing agents. Acids.

Hazardous Decomposition ProductsCarbon monoxide. Carbon dioxide (CO₂).**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

Eye Contact Causes serious eye irritation.

Skin Contact Prolonged contact may cause redness and irritation.

Inhalation Do not inhale.

Ingestion Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isopropyl Alcohol 67-63-0	= 4396 mg/kg (Rat)	= 12800 mg/kg (Rat) = 12870 mg/kg (Rabbit)	= 72.6 mg/L (Rat) 4 h
Proprietary	= 1540 mg/kg (Rat)	> 2400 mg/kg (Rat) > 4640 mg/kg (Rabbit) = 794 µL/kg (Rabbit)	> 12.7 mg/kg (Rat) 4 h > 17.6 mg/L (Rat) 1 h

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** The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl Alcohol 67-63-0		Group 3		X

Legend

IARC (International Agency for Research on Cancer)
Group 3 IARC components are "not classifiable as human carcinogens"
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical measures of toxicity

Not determined

Unknown Acute Toxicity 3.12% of the mixture consists of ingredient(s) of unknown toxicity.

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 microorganisms	Crustacea
Isopropyl Alcohol 67-63-0	1000: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50 1000: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	9640: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 11130: 96 h <i>Pimephales promelas</i> mg/L LC50 static 1400000: 96 h <i>Lepomis macrochirus</i> µg/L LC50		13299: 48 h <i>Daphnia magna</i> mg/L EC50
Proprietary		500: 96 h <i>Brachydanio rerio</i> mg/L LC50 1000: 96 h <i>Lepomis macrochirus</i> mg/L LC50		25.2: 24 h <i>Daphnia magna</i> mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Isopropyl Alcohol 67-63-0	0.05

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.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Isopropyl Alcohol 67-63-0	Toxic Ignitable

14. TRANSPORT INFORMATION

Note

According to 49 CFR §173.150(f)(1), this material should be reclassified as "NA1993, Combustible Liquid, N.O.S." if it is shipped in bulk. Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

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

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 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Isopropyl Alcohol - 67-63-0	67-63-0	10-20	1.0

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Isopropyl Alcohol 67-63-0	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	2	2	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2*	2	0	Not determined

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Revision Note: New format

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