Page 1 of 4 Tuesday, July 02, 2013

MSDS - Material Safety Data Sheet Product Name: GLASS CLEANER WITH AMMONIA (SPRAY PUMP)

MSDS No.: GC33ES

I. Basic Information:

Manufacturer: RADIATOR SPECIALTY COMPANY

Address: 600 RADIATOR ROAD

City, ST Zip: INDIAN TRAIL, NC 28079

Country: USA

Contact: Robert Geer

Information Telephone Number: 704-684--181 1
Emergency Contact: RMPDC (877-740-5015)
Emergency Telephone Number: 303-623-5716

Emergency Restrictions:

Product Name: GLASS CLEANER WITH AMMONIA (SPRAY PUMP)

MSDS No.: GC33ES

Issue Date: 07/02/2013 **Supersedes Date:** 04/17/2009

II. Hazards Identification:

EMERGENCY OVERVIEW

CAUTION: Eye Irritant

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Health Effects

Route(s) of Entry:

Absorption, Eye, Inhalation, and Ingestion.

Health Hazards (Acute and Chronic):

See signs and systems below

Signs and Symptoms:

Eye Contact: Direct spray of vapors may be irritating or harmful to eyes. Skin Contact: Prolonged contact may cause irritation due to defatting of skin.

Inhalation: High concentration of vapors may irritate nose and throat and cause headaches and nausea.

Ingestion: Can cause irritation, gastric disturbances, and nausea...

Medical Conditions Generally Aggravated by Exposure:

None known

Other Health Warnings:

None known

Potential Environmental Effects

Not Available

III. Composition/Information on Ingredients:

Chemical Name	CAS No.	% Range	Trade Secret
2-Butoxyethanol	111-76-2	0.1 - 1.0	
Ammonium hydroxide	1336-21-6	0.1 - 1.0	
Aqua	7732-18-5	60.0 - 100.0	
Isopropyl alcohol	67-63-0	1.0 - 5.0	

IV. First Aid Measures:

Emergency and First Aid Procedures:

Eye Contact: Flush eyes with water for 15 minutes while lifting upper and lower eyelid. Get prompt medical attention.

Skin Contact: Wash with soap and water. If irritation persists, get prompt medical attention. Inhalation: Move to fresh air. If breathing becomes difficult get prompt medical attention.

Ingestion: Drink water or milk. Call Poison Control Center, physician, or hospital emergency room immediately.

Page 2 of 4 Tuesday, July 02, 2013

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Note to Physicians:

N/E

V. Fire Fighting Measures:

Suitable Extinguishing Media:

Product is nonflammable. Use extinguishing media suitable for source of fire. Example: Water Fog, Foam, Carbon Dioxide, Dry Chemical

Unsuitable Extinguishing Media:

None

Products of Combustion:

Cabon dioxide and carbon monoxide

Protection of Firefighters:

Wear self-contained positive pressure breathing apparatus and protective clothes.

VI. Accidental Release Measures:

Personal Precautions:

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental Precautions:

Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred.

Methods for Containment:

Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc).

Methods for Cleanup:

Using a scoop, place contaminated material into an approved chemical waste container. Where possible, vacuum to recover material.

Other Information:

Rinse water may be disposed of down a sanitary sewer system if authorized by the local municipality.

VII. Handling and Storage:

Handling Precautions:

Use with adequate ventilation. Do not spray into electrical connections or outlets. Use good hygiene, wash hands after use and before eating. Keep away from Children and Animals

Storage Precautions:

Store in cool dry area below 120°F, Keep container closed when not in use. Avoid contact with strong oxidizing agents.

VIII. Exposure Controls/Personal Protection:

Chemical Name	OSHA PEL	ACGIH TLV	Other Limits
Ammonium hydroxide	25 ppm (TWA)	25 ppm	Not Available
2-Butoxyethanol	25 ppm	25 ppm	Not Available
Isopropyl alcohol	400 ppm	400 ppm	Not Available
Aqua	N/E	N/E	Not Available

Engineering Controls:

See Section above for applicable exposure limits. Use with adequate ventilation. If TLV is exceeded, wear NIOSH approved respirator.

Personal Protective Equipment:

For prolonged exposure wear protective safety glasses, gloves, and apron.

Page 3 of 4 Tuesday, July 02, 2013

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IX. Physical and Chemical Properties:

Boiling Point: 212 F

Boiling Range: Not Available **Solubility In Water:** Soluble

Flash Point: None

Odor Threshold: Not Available Vapor Density (AIR = 1): N/D

pH Range: 9 - 10

Decomposition Temp: Not Available Lower Explosive Limit: N/D Specific Gravity (H20 = 1): 0.98

Other Information: VOC Content: 3%

Melting Point: N/A

Freezing Point: Not Available

Evaporation Rate (Butyl Acetate = 1): < 1

Flash Point Method: TCC

Appearance and Odor: Clear liquid with alcohol-ammonia odor.

Vapor Pressure (mm Hg.): N/D
Partition Coefficient: Not Available
Auto-Ignition Temp: Not Available
Upper Explosive Limit: N/D

X. Stability and Reactivity:

Stability:

Stable

Conditions to Avoid:

See Incompatible materials below

Incompatible Materials:

Avoid contact with strong oxidizing agents

Hazardous Decomposition Products:

Carbon Monoxide, Carbon Dioxide

Possibility of Hazardous Reactions:

Will not occur

XI. Toxicological Information:

N/D

XII. Ecological Information:

N/D

XIII. Disposal Considerations:

DISPOSAL: This container may be recycled in a recycling centers when empty. Before offering for recycling, empty the can or bottle by using the product according to the label. If recycling is not available, wrap the container and discard in the trash. Dispose of unused product in accordance with all local, state government and federal laws and regulations

XIV. Transport Information:

Shipping Name: See below

DOT Hazard Class: Not Available

UN/NA#: Not Available
Transportation Information:

DOT Shipping Name: Not DOT regulated.

DOT Hazard Class: None

DOT Subsidiary Hazard Class: Not Available

Packing Group: Not Available

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XV. Regulatory Information:

SARA 313 Reportable Chemicals. Ammonium hydroxide 1336-21-6 2-Butoxyethanol 111-76-2 Isopropyl Alcohol 67-63-0

USA TSCA: All components of this material are listed on the US TSCA Inventory.

State RTK Chemicals:

Ammonium hydroxide 1336-21-6 2-Butoxyethanol 111-76-2 Isopropyl Alcohol 67-63-0

Isopropyl Alcohol 67-6	3-0				
XVI. Other Inform	nation:				
Chemical State: Chemical Type:	X Liquid Pure	Gas Solid Mixture	NFPA He <u>a</u> lth	Fire 0	
Hazard Category: X Acute	Chronic Pressure	Fire Reactive		0 Special	
Additional Manufactur	er Warnings:				
Do not used in confined area without proper ventilation. Contact lenses may cause further damage in case of splash into eye. KEEP AWAY FROM CHILDREN AND ANIMALS!			1	Health	
			0	Flammability	
N/E: Not Established N/D: Not Determined			0	Physical Hazard	
			Δ	Pers. Protection	

Additional Product Information:

N/A: Not Applicable N/AV: Not Available

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