

Tower Products, Inc., 2703 Freemansburg Ave., Easton, PA 18045

Information Telephone Number: 1-800-527-8626 or 610-253-6206

For Chemical Spill Emergency - Call 1-800-424-9300

SECTION 1: PRODUCT INFORMATION

Product Name: **AR-1** (One-Step Alcohol Replacement)

D.O.T. Designation: Cleaning Liquid (Non-Regulated Combustible)

U.N. Designation: Flammable Liquids, N.O.S.(Contains Ethylene Glycol Monopropyl Ether), 3, UN1993, PGIII

SECTION 2: HAZARDOUS COMPONENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENT	CAS No	% WT.	OSHA PEL	ACGIH TWA-TLV	OTHER RATING	OSHA STEL
Ethylene Glycol Monopropyl Ether	2807-30-9	90-100			25ppm(mfr-skin)	
2,2,4 Trimethyl-1-3-Pentenediol Monoisobutyrate	25265-77-4	1-10				

SECTION 3: PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: IBP 301 degrees F., 149.5 degrees C.

Specific Gravity: (Water=1) 0.913

Vapor Pressure: (mmHG, calculated) 1.3mm at 68 degrees F., 20 degrees C.

Melting Point: N/A

Vapor Density: (Air=1, calculated) 3.6

Solubility in Water: Complete

Appearance & Odor: Water white liquid, mild odor

Maximum VOC Content: 7.6 lbs. per gallon (913 grams per liter)

Maximum VOC% : >99% (EPA Method 24)

SECTION 4: FIRE AND EXPLOSION DATA

Flash Point (Tag Closed Cup Method): 120 degrees F.

Flammable Limits (Calculated): LEL: 1.26% UEL: 15.8%

Extinguishing Media: Use dry chemical or carbon dioxide.

Special Fire-fighting Procedures: Use self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Combustible liquid. Upon combustion, the product may form carbon monoxide and other organic compounds. Product containers may rupture from vapor pressure when exposed to heat from fire.

SECTION 5: REACTIVITY DATA

WARNING: Spontaneous combustion may occur when solvent soaked combustible materials (paper, cotton, etc.) are allowed to stand in a confined area.

Stability: Stable, however may form peroxides of unknown stability.

Incompatibility: Avoid strong oxidizing agents. Minimize exposure to air, potential peroxide former.

Hazardous Decomposition/Byproducts: Carbon monoxide during combustion. Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid exposure to high heat sources, electrical and welding arcs and open flame. Also avoid strong oxidizing agents.

SECTION 6: HEALTH HAZARD DATA

Routes of Entry: Inhalation, Ingestion, Skin, Skin Absorption

Health Hazards(Acute): May cause blood disorders based on animal data.

Health Hazards(Chronic): Prolonged skin contact may cause dermatitis. May cause blood disorders based on animal data.

Eye Contact: May lead to irritation.

Skin Contact: May lead to dermatitis. May cause blood disorders based on animal data.

Ingestion: May be harmful if swallowed. May cause blood disorders based on animal data.

Carcinogenicity (NTP, IARC, OSHA): Components of this product have not shown any evidence of carcinogenicity.

Medical Conditions Aggravated by Exposure: May cause blood disorders. May aggravate pre-existing kidney disorders.

Emergency and First Aid Procedures:

For Skin Contact: Flush with large volume of water for at least 15 minutes. Get immediate medical attention.

For Inhalation: Remove to fresh air. Get immediate medical attention.

For Eye Contact: Flush with large volume of water for at least 15 minutes. Get immediate medical attention.

For Ingestion: Get immediate medical attention. Induce vomiting as directed by medical personnel.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE/REGULATORY INFORMATION

Steps to be taken in case material is released or spilled:

(Minor Spills): Absorb material with ground clay, vermiculite, or similar absorbent material, then place into containers for removal.

(Major Spills): Dike and contain spill. Eliminate potential sources of ignition, and shut off source of spill if possible. Remove liquid by chemical vacuum, absorbent, or other safe and approved method and place into containers for legal disposal. Flush area with water to remove residue, and remove flushed solutions as above.

(Waste Disposal Method): Dispose of all waste in accordance with federal, state and local regulations.

Regulatory Information:

Chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) and 40CFR372: Ethylene Glycol Monopropyl Ether.

Product may contain components which are further regulated by state and/or local agencies - Consult Appropriate Agencies.

Precautions to be Taken in Handling and Storing: Ventilation in work area should be sufficient to maintain atmosphere with vapor level below lowest listed TLV in Section 2. If TLV's are exceeded, use a respirator with appropriate NIOSH approved cartridges or supplied air equipment. Keep containers closed when not in use. Combustible liquid - empty containers can be hazardous and contain explosive vapors.

The components of this product are listed on both the United States TSCA and the Canadian DSL.

HMIS: Health Hazard: **2** Flammability: **2** Reactivity: **0** Personal Protection: **B**

SECTION 8: CONTROL MEASURES

Respiratory Protection: Needed if TLV's in Section 2 are exceeded. Use supplied air equipment or respirators with proper NIOSH approved cartridges.

Ventilation: Local and mechanical exhaust recommended. Avoid open electrical sources near product vapor areas.

Protective Gloves: Impervious or chemical resistant gloves (consult safety equipment supplier).

Eye Protection: Chemical splash goggles recommended to protect against potential eye contact.

Other Protective Clothing and Equipment: Safety shoes and aprons recommended.

Work and Hygiene Practices: Do not take internally. Avoid skin contact and wash skin after using products. Do not eat, drink or smoke in work area. Keep away from children.

FOR MORE INFORMATION, CONSULT TOWER PRODUCTS, INC.

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