

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Product Name: AMCO DMC Glycerine CAS number: N/A - mixture
Chemical Name & Synonyms: N/A - mixture
Appearance: Water clear liquid with alcohol odor.
Use: General purpose flux for side seam soldering.
Manufacturer: Force Industries Division Tel. 610-647-3575
EMERGENCY PHONE No. CALL CHEMTREC (800) 424-9300 * Available 24 Hours

II. CHEMICAL COMPOSITION

Material	SARA III	CAS Number	OSHA PEL	ACGIH TLV
Isopropanol	<60.0%	67-63-0	1225 mg/m ³	980 mg/m ³
Hydrochloric Acid	<10.0%	7647-01-0	7 mg/m ³	7.5 mg/m ³
Ethanolamine	-----	141-43-5	8 mg/m ³	8 mg/m ³
Glycerine	-----	56-81-5	10 mg/m ³	10 mg/m ³

Others, if any, are non-hazardous and are claimed as trade secret.

Hazard Rating: HMIS: (H =3 F=3 R=0 PE=C) NFPA: (H=3 F=3 R=0)

III. POTENTIAL HEALTH EFFECTS AND HEALTH HAZARD DATA

Target organ statement: Strong irritant to skin, eyes and respiratory system.
Effects of Chronic Exposure: Central nervous system depression may result.
Effects of Acute Overexposure
Swallowing: May cause nausea and diarrhea. Chemical burns to digestive system.
Skin Absorption: None currently known.
Inhalation: Irritant to respiratory system. Inhalation of vapors may result in giddiness, headache, or dizziness. Existing lung disorders will be aggravated.
Skin Contact: May cause chemical burns, dermatitis. Existing skin disorders may be aggravated.
Eye Contact: Irritation to eye surfaces. Possible damage to the eye.

IV. EMERGENCY AND FIRST AID PROCEDURES

Swallowing: Call a physician at once or your poison control center.
Skin: Wash hands with soap and water to remove all residue. If rash develops, consult a physician.
Inhalation: Remove to fresh air. If vapors are inhaled, call a physician.
Eyes: Flush with water for at least 15 minutes to remove all residues. Promptly get medical help. Contains hydrochloric acid.

V. FIRE AND EXPLOSION DATA

Flashpoint (°F), TCC 53
Flammable limits in air: (% by volume) LOWER: 2.5 as isopropanol UPPER: 12.0 as isopropanol
Extinguishing media: Dry chemical or CO₂
Special firefighting procedures: Wear protective clothing
Unusual fire and explosion hazards: None

VI. REACTIVITY INFORMATION

Stability considerations/Conditions to avoid: Stable/Heat, sparks, open flames
Hazardous polymerization/Conditions to avoid: Will not occur/None
Incompatibility/Materials to avoid: Concentrated acids, oxidizers, and alkalis
Hazardous combustion or, Decomposition products: Carbon monoxide and/or carbon dioxide

VII. SPILL AND LEAK RESPONSE

Steps to be taken if material is released or spilled: Contain spill, absorb, sweep-up. Remove to chemical sewer. Flush area to chemical sewer.
Waste disposal method: Dispose of in accordance with all federal, state, and local regulations.

MATERIAL SAFETY DATA SHEET

VIII. SPECIAL PROTECTION EQUIPMENT

Respiratory protection: If the workstation is not properly ventilated to exhaust all fumes and vapors, use a NIOSH approved mask.

Ventilation: Maintain airflow away from user to remove all fumes and vapors, so that the PEL is never exceeded.

Protective gloves: Chemical and oil impervious.

Eye protection: Chemical tight safety goggles. Do NOT wear contact lenses.

Other protective equipment: Full protective equipment normally used in a soldering operation so as to prevent any contact.

IX. STORAGE, HANDLING AND SPECIAL PRECAUTIONS

Precautions to be taken in handling and storage: Wash hands thoroughly after handling to remove all residue. Store material under ambient conditions. Vent drum occasionally.

Other precautions: Remove and professionally wash contaminated clothing before re use.

X. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (°F @ 760 mmHg):	>202	Specific gravity (H ₂ O = 1 @ 72°F):	0.890
Vapor density (air = 1):	1.630	Vapor pressure:	19.38
Percent volatiles by volume:	66.15	Solubility in water:	Appreciable
Evaporation rate (butyl acetate = 1):	>1		

XI. OPTIONAL INFORMATION

Department of Transportation: Domestic Ground

Proper shipping name: Flammable liquids, corrosive, N.O.S.
(Isopropyl alcohol, hydrochloric acid)

Hazard Class: 3

ID & Packing Group Number: UN 2924 PG II

ERG Guide Number: 132

Toxic Substance Control Act: All components of this compound are listed within the TSCA inventory.

Hazard Communication Program: Hazardous warnings and training requirements as mandated for flammable liquids.

State Right-to-Know Programs:

Pennsylvania: This product contains the following chemicals listed in PA Code Title 34, Hazardous Substance List: Isopropyl alcohol, Ethanolamine and Hydrochloric acid.

California: This product contains the following compounds subject to the reporting and labeling requirements of Proposition 65: None

NOTES: NA=Not Applicable
H=Health

NE=Not Established
F=Fire R=Reactivity PE=Personal Equipment

While we believe all information presented herein is accurate and reliable, the data are not to be taken as a guarantee or representation of any kind for which Force Industries assumes legal responsibility. They are offered solely for your consideration, investigation, and verification.