

Flux Remover for PC Boards



4140

A special blend of ethyl alcohol, isopropanol and ethyl acetate. Excellent for removing rosin, non-rosin, no clean fluxes, and ionic contamination.

- Moderate evaporation
- Highly flammable
- Low odor
- Zero residue



Available Sizes

Catalog Number	Sizes Available	Description
4140-P	10 ml (0.34 oz)	Felt Pen
4140-400G	400 g (14 oz)	Aerosol
4140-1L	1 L (33 oz)	Liquid
4140-4L	4 L (1 gallon)	Liquid
4140-20L	20 L (5 gallons)	Liquid



Material Safety Data Sheet

Section 1: Product Identification

MSDS Code: 4140 – liquid**Name: Flux Remover - Plastic Safe****Related Part Numbers: 4140-500ML; 4140-1L; 4140-4L; 4140-20L; 4140-P**

Use: For removing flux.

Section 2: Hazardous Ingredients

CAS#	Chemical Name	Percentage by weight	ACGIH TWA	Osha Pel	Osha Stel
64-17-5	Ethanol	80 - 90	1000ppm	1000ppm	1000ppm
141-78-6	Ethyl acetate	1 - 5	400ppm	400ppm	N/e
67-63-0	2-propanol	2 - 10	400ppm	400ppm	500ppm

Section 3: Hazards Identification

WHMIS Codes: B2, D2B**NFPA Ratings:** Health 1 Flammability 3 Reactivity 0**HMIS Ratings:** Health 1 Flammability 3 Reactivity 0**Eyes:** Causes severe eye irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.**Skin:** May cause skin irritation.**Inhalation:** May cause respiratory tract irritation, inhalation of high concentrations may cause central nervous system effects characterized by headache, dizziness, and unconsciousness.**Ingestion:** Harmful if swallowed. May cause gastrointestinal irritation with nausea, diarrhea, vomiting, faintness, lack of coordination and coma.**Chronic:** Long-term intensive exposure may cause liver or kidney damage.

Section 4: First Aid Measure

Eyes: Remove contact lenses. Flush with water or saline for 20 minutes. Get medical aid.**Skin:** Wash skin with large quantities of soap and water. Get medical aid if symptoms persist.**Inhalation:** Immediately remove and expose to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.**Ingestion:** Do not induce vomiting. If conscious, give 1-2 glasses of water. Get medical aid.

Section 5: Fire Fighting Measures

Autoignition Temperature: 427°C**Flash Point:** 16°C**LEL / UEL:** 3/19**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

General Information: Will burn if involved in a fire. Containers may explode in the heat of a fire.

Section 6: Accidental Release Measures

Spill Procedure: Remove all sources of ignition. Provide adequate ventilation. Wear appropriate personal protection. Sprinkle absorbent compound onto spill, then sweep into a plastic or metal container. Wipe up further residue with paper towel and place in container. Wash spill area with soap and water.

Section 7: Handling and Storage

Handling: Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Do not expose container to heat or flame.

Storage: Keep away from sources of ignition. Store in a cool, dry, well-ventilated area, away from incompatible substances.

Section 8: Exposure Controls

Routes of entry: Eyes, ingestion, inhalation, and skin.

Ventilation: Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits.

Personal Protection: Wear appropriate protective eyeglasses or chemical safety goggles. Wear appropriate protective clothing to prevent skin contact. Use a NIOSH approved respirator when necessary.

Section 9: Physical and Chemical Properties

Physical State:	Liquid	Odor:	Ethereal	Solubility:	Miscible	Evaporation Rate:	1.8 (ether = 1)		
Boiling Point:	79°C	Specific Gravity:	0.79	Vapor Pressure:	1 PSI @20°C	Vapor Density:	0.811 (Air=1)	pH:	N/a

Section 10: Stability and Reactivity

Stability: Stable at normal temperatures and pressures.

Conditions to avoid: Temperatures over 40°C, ignition sources, and incompatible materials. Exposure to moist air or water.

Incompatibilities: Alkali and alkaline earth metals, powdered aluminum, zinc, magnesium, and beryllium, acids, acid anhydrides, oxidizing agents, reducing agents.

Polymerization: Has not been reported.

Decomposition: Halogens, halogen acids, possibly carbonyl halides, carbon dioxide, and carbon monoxide.

Section 11: Toxicological Information

Sensitization: (effects of repeated exposure) Repeated eye contact may cause conjunctivitis. Repeated skin contact may cause dermatitis.

Carcinogenicity: (risk of cancer) Not known to.

Teratogenicity: (risk of malformation in an unborn fetus) No

Reproductive Toxicity: (risk of sterility) No

Mutagenicity: (risk of heritable genetic effects) No



Lethal Exposure Concentrations:

Ingestion (LD50): 7g/kg (rat)

Inhalation (LC50): >320,000 /4h

Skin (LD50): 20 g/kg (rabbit)

Section 12: Ecological Information

General Information: Avoid runoff into storms and sewers, which lead into waterways. Water runoff can cause environmental damage.

Environmental Impact Data: (percentage by weight)

CFC: 0

HFC: 0

Cl.Solv: 0

VOC: 100

HCFC: 0

ODP: 0

Section 13: Disposal Information

General Information: Dispose of in accordance with all local, provincial, state, and federal regulations. Water runoff can cause environmental damage.

Section 14: Transportation Information

Ground: (all sizes 1 liter or less)

Consumer Commodity, ORM-D

Ground: (all sizes larger than 1 liter)

Shipping Name-Alcohols N.O.S. [Ethanol] Flash Point 13°C, Class 3, UN# 1987, Packing Group II, Subsidiary Risk-Flammable Liquid. Use only MG Chemicals UN certified outer cartons. Tape all seams on carton. Hazard Label required-Flammable Liquid. A double arrow orientation label is required and is already printed on the original outer carton. Shipper must be trained and certified to handle documented dangerous goods. Refer to CFR 49, TDG regulations (Canada).

Air:

Shipper must be trained and certified. Refer to IATA regulations.

Sea

Class 3, UN# 1987, Packing Group II. Shipper must be trained and certified. Refer to IMDG regulations.

Section 15: Regulatory Information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

SARA (Superfund Amendments and Reauthorization Act of 1986, USA, 40 CFR 372.4)

None of the chemicals in this product have a reportable quantity.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product does not contain any chemicals subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

CAA (Clean Air Act, USA)

This product does not contain any class 1-ozone depletors.

This product does not contain any class 2-ozone depletors.

This product does not contain any chemicals listed as hazardous air pollutants.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, May 1, 1997 revision, USA)

This product does not contain any chemicals listed.

Health Canada

Labeling and containers used in this product are listed in compliance with Consumer Chemicals and Container regulations.

Environment Canada

Chemicals in this product are listed on the Domestic Substances List in the Canadian Environmental Protection Act

This product does not contain any ozone depleting substances.