Material Safety Data Sheet

Revision Date	**Prepared by**	**Technical Information**
November 9, 2010	Patti Rogers	1-800-201-8822 or support@mgchemicals.com
Head Office		**Emergency**
9347 - 193 Street, Surrey, B.C., V4N 4E7		Phone Canutech (613) 996-6666 Collect 24 hrs

For updates please download from www.mgchemicals.com or fax requests to 1-800-708-9888

Section 1: Product Identification

MSDS Code: 413B - Aerosol Name: Heavy Duty Flux Remover

Related Part Numbers: 413B-425G

Use: Removing flux.

Section 2: Hazardous Ingredients

CAS#	Chemical Name	Percentage by weight	ACGIH TWA	Osha Pel	Osha Stel
75-37-6	1,1-Difluoroethane	22-25%	N/E	N/E	N/E
67-63-0	2-propanol	8-10%	200ppm	400ppm	500ppm
141-78-6	Ethyl acetate	35-45%	400ppm	400ppm	500ppm
67-64-1	2-propanone	15-22%	500ppm	1000ppm	750ppm

Section 3: Hazards Identification

Eyes: Liquid contact with eyes can cause eye irritation, stinging, tearing, redness, and swelling of eyes.

Skin: May cause skin irritation with pain and stinging, especially if skin is abraded.

Inhalation: Solvents may cause respiratory tract irritation, liver and kidney damage, and adverse central nervous system effects. Propellant can asphyxiate; high concentrations in the air can cause a deficiency of oxygen with the risk of unconsciousness.

Ingestion: May cause respiratory and digestive tract irritation. May cause kidney damage, and central nervous system depression. Aspiration hazard if swallowed can enter lungs and cause damage.

Chronic: Prolonged or repeated exposure may cause dermatitis and defatting of the skin.

Section 4: First Aid Measure

Eyes: Remove contact lenses. Flush with water. Get medical aid.

Skin: Wash skin with soap and water. Get medical aid if symptoms persist.

Inhalation: Immediately remove from exposure 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: 450°C **Flash Point:** -18°C **LEL / UEL:** 2 / 13

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. Vapors may form an explosive mixture with air. Vapors can travel to source of ignition and flash back.

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:	Aerosol	**Odor:** Ethereal		**Solubility:** Partial		**Evaporation Rate:** 7.7 (ether=1)	
Boiling Point:	63°C	**Specific Gravity:**	0.845	**Vapor Pressure:** @21°C	48 PSI	**Vapor Density:**	2.5 (Air=1) **pH:** 7

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, acids, acid chlorides, acid anhydrides, oxidizing agents, reducing agents, powdered aluminum, zinc, magnesium, and beryllium. Hydrogen peroxide, potassium hydroxide, potassium t-butoxide, nitrogen tetroxide, and liquid nitrogen, chlorines, hydrocarbons, ethylene oxide, halogens, isocynates. Do not use with aluminum component at temperature above 120°F.

Polymerization: Will not occur.

Decomposition: Carbon monoxide, carbon dioxide, hydrogen chloride, phosgene, hydrofluoric acid, and carbonyl fluoride.

Section 11: Toxicological Information

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

Carcinogenicity: (risk of cancer) No

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

Reproductive Toxicity: (risk of sterility) No

Mutangenicity: (risk of heritable genetic effects) No

Lethal Exposure Concentrations:	Ingestion (LD50):	Inhalation (LC50):	Skin (LD50):	Inhalation (TCLo):
1,1-Difluoroethane	N/A	977 gm/m3/2H Mouse	N/A	25 pph/30M Rat
2-propanol	3600 mg/kg Mouse	16000 ppm/8H Rat	12800 mg/kg rabbit	980 mg/m3/24H Guinea Pig
Ethyl acetate	5620 mg/kg Rat	200 gm/m3 Rat	>20 mL/kg Rabbit	200 ppm/6M Mouse
2-propanone	3 gm/kg Mouse	44 mg/m3/4H Mouse	20 ml/kg Rabbit	1250 mg/m3 Rabbit

Section 12: Ecological Information

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

Volatile Organic Compounds, % by weight: 75%

Volatile Organic Compounds, grams per litre: 633.75g/l

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 Canada:

Classified as **Consumer Commodity**.
Recommend Shipper be trained and certified. Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations).

Ground USA:

Classified as **ORM-D**.
Recommend Shipper be trained and certified. Refer to USA CFR 49 Regulations (Parts 100 to 185).

Air:

Shipper must be trained and certified. Refer to IATA Dangerous Goods Regulations.
UN number: **1950**, Shipping Name: **AEROSOLS**, **Flammable,** Class: **2.1**, Flash Point: -18°C.
Refer to Pkg Instr Y203. Recommend using original MG Chemicals certified outer cartons. Tape all seams on the carton. Hazard Label required – Aerosols, flammable. A double arrow orientation label is required and is already printed on the original outer carton.

Sea - All Sizes:

Shipper must be trained and certified. Refer to IMDG regulations.
UN number: **1950**, Shipping Name: **AEROSOLS**, **Flammable,** Class: **2.1**, Flash Point: -18°C.
Storage category "A", segregation as for class 9 but away from sources of heat and separated from goods of class 1 except for those in division 1.4.

Section 15: Regulatory Information

CANADA

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.

DSL

All ingredients in this product are listed on the Domestic Substances List

Health Canada

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling regulations.

Industry and Science Canada

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product are in compliance.

WHMIS

This product belongs to the following categories: **A, B2,D2B**

USA

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.

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

This product contains 8% of 2-propanol (CAS# 67-63-0), a toxic chemical subject to the reporting requirements.

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

This product contains 8% of 2-propanol (CAS# 67-63-0) a chemical 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.

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

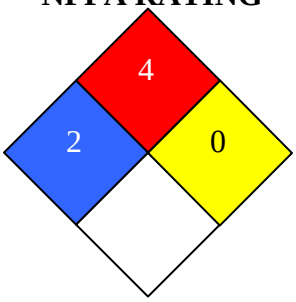
This product does not contain any chemicals listed.

HMIS RATING

HEALTH:	2
FLAMMABILITY:	3
PHYSICAL HAZARD:	0
PERSONAL PROTECTION(PPE):	H

Protection = H (Splash goggles, gloves, protective apron, and vapor respirator.)

NFPA RATING



EUROPE

RoHS

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

WEEE

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

Section 16: Other Information

Definitions: N/A = not applicable, N/E = not established

Disclaimer: This material safety data sheet is provided as an information resource only. M.G. Chemicals believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to verify its validity. The buyer assumes all responsibility of using and handling the product in accordance with federal, state, and local regulations.