

Material Safety Data Sheet

Revision DatePrepared byOct 11th, 2005David MacKinnonHead Office9347 - 193 Street, Surrey, B.C., V4N 4E7

Technical Information 1-800-201-8822 or support@mgchemicals.com Emergency Phone Canutech (613) 996-6666 Collect 24 hrs

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

Section 1: Product Identification

MSDS Code: 419B - aerosol Name: Acrylic Lacquer Conformal Coating Related Part Numbers: 419B-340G

Use: Protective coating for pc boards.

Section 2: Hazardous Ingredients

CAS#	Chemical Name	Percentage by weight	ACGIH TWA	Osha Pel	Osha Stel
811-97-2	1,1,1,2 - tetrafluoroethane	30 – 60	1000ppm	n/e	n/e
67-64-1	2-propanone	10 - 30	750ppm	1000ppm	1000ppm
108-88-3	toluene	7 - 13	50ppm	100ppm	150ppm
64-17-5	ethyle alcohol	7 – 13	200ppm	200ppm	250ppm
141-78-6	ethyl acetate	1 – 5	400ppm	400ppm	n/e
108-65-6	1-methoxy-2 propanone acetate	1 – 5	n/e	n/e	n/e
110-43-0	2-heptanone	1 – 5	50ppm	100ppm	n/e
110-19-0	2-methylpropyl ester acetic acid	1 – 5	150ppm	150ppm	n/e
67-63-0	2-propanol	0.1 – 1	400ppm	400ppm	500ppm

Section 3: Hazards Identification

WHMIS Codes:	: A, B5, D2A			
NFPA Ratings:	Health 1 Flammability 3 Reactivity 0			
HMIS Ratings:	Health 1 Flammability 3 Reactivity 0			
Eyes:	Liquid in contact with eyes may cause permanent eye damage.			
Skin:	May cause skin irritation with pain and stinging, especially if skin is abraded.			
Inhalation:	Solvents may cause respiratory tract irritation, headaches, and possible dizziness.			
Ingestion:	May cause respiratory and digestive tract irritation.			
Chronic:	Prolonged and repeated exposure may cause dermatitis, defatting of the skin, liver and kidney damage, and adverse central nervous system effects.			

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 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:	465°C	Flash Point: ^{-18°C}	LEL / 1 / UEL: 36		
Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or chemical foam.				
General Information:	Will burn if involved vapor trail is possibl	in a fire. Containers may explode in the heat of a fire. le.	Flash back along		

Section 6: Accidental Release Measures

SpillRemove all sources of ignition. Provide adequate ventilation. Wear appropriate personal protection.Procedure: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. Keep from freezing.

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 fast Rate:	
Boiling Point:	n/a	Specific Gravity:	0.85	Vapor Pressure:		Vapor Density: 4.1 (Air=1)	pH: n/

Section 10: Stability and Reactivity

Stability:	Stable at normal temperatures and pressures.
Conditions to avoid:	Temperatures over 40°C, ignition sources, and incompatible substances.
Incompatibilities:	Alkali and alkaline earth metals, powdered aluminum, zinc, magnesium, and beryllium, strong oxidizers, hydrogen peroxide, Lewis or mineral acids.
Polymerization:	Will not occur.
Decomposition:	Halogens, halogen acids, possibly carbonyl halides, carbon dioxide, and carbon monoxide, nitrogen oxides

Section 11: Toxicological Information						
Sensitization: (effects of repeated exposure)	Prolonged or 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)

Toluene is listed under **California Proposition 65** under chemicals known to cause reproductive toxicity.

Mutangenicity: (risk of herit effects)	table genetic No				
Lethal Exposure Concentrations:	Ingestion(LD50):	7400 mg/kg (rat)	Inhalation (LC50):	16000 ppm/4h (rat)	Skin n/e (LD50):

Section 12: Ecological Information

GeneralAvoid runoff into storms and sewers which lead into waterways. Water runoff can cause
environmental damage.

Environmental Impact Data: (percentage by weight)							
CFC: 0	HFC: 45	Cl.Solv.: 0	VOC: 41	HCFC : 0	ODP : 0		
Section 13: Disposal Information							

GeneralDispose of in accordance with all local, provincial, state, and federal regulations. Water runoff
can cause environmental damage.

Section 14: Transportation Information

Ground:

Consumer Commodity, ORM-D

Air:

Shipper must be trained and certified. Refer to IATA regulations. Must be shipped through a dangerous goods consultant.

Sea:

Limited quantity, UN#1950, Class 2.1. 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 contains the following chemicals subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372: Methanol (CAS #67-56-1, <1% by weight).

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

Section 15: Regulatory Information cont'd

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 contains methanol (CAS #67-56-1, 1% by weight), listed as a hazardous air pollutant.

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



This product contains toluene, listed under chemicals know to the state to cause reproductive toxicity.

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.

Industry and Science Canada

Labeling, product identity, net quantity declaration, minimum printing type size heights, and packaging of this product is in compliance with the Consumer Packaging and Labeling Act and Regulations. This product is not slack filled in accordance to chapter 4 prohibitions.

RoHS (The restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2004).

This product is RoHS compliant.

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.