

# M.G. Chemicals

Registered Quality System ISO 9001 QMI Certificate #00 4008 Toronto, Ontario, Canada

## Material Safety Data Sheet

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Technical Information: 1-800-201-8822

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For updates please download from [www.mgchemicals.com](http://www.mgchemicals.com), or fax requests to 1-800-708-98

### Section 1: Product Identification

Product Code: **701**

Name: **Negative Resist - Type 1**

Use: Negative photo etch resist

### Section 2: Hazardous Ingredients:

CAS#	ChemicalName	Percentage by weight	ACGIH TWA	Osha Pel	Osha Stel
110-49-6	2-methoxyethyl acetate	75 - 97	5ppm	25ppm	5ppm

### Section 3: Hazards Identification

**Eyes:** Causes irritation, seen as excess redness and swelling of the conjunctiva. Corneal injury may occur.

**Skin:** No evidence of adverse effects from information available.

**Inhalation:** Vapor may be irritating and cause headache, dizziness, drowsiness, fatigue, nausea, vomiting, loss of coordination, and loss of appetite. May aggravate asthma and inflammatory or fibrotic pulmonary disease.

**Ingestion:** Moderately toxic. Causes headaches, dizziness, nausea, vomiting, mental confusion, incoordination, prostration and death. Kidney damage has been described.

**Chronic:** Repeated overexposure may cause injury to bone marrow and blood cells, kidney, liver, and testes.

### Section 4: First Aid Measures

**Eyes:** Remove contact lenses. Flush with water or saline for 15 minutes. Get medical aid.

**Skin:** Wash skin with soap and water for 15 minutes. Get medical aid if irritation persists.

**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: 392°C Flash Point: 43.9°C LEL/UEL: 1.7 / 8.2

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. Highly flammable vapors are heavier than air and may accumulate in low areas. Flash back along vapor trail is possible.

NFPA Ratings: Health 1 Flammability 2 Reactivity 0

HMIS Ratings: Health 1 Flammability 2 Reactivity 0 WHMIS Code B2, D2A

### Section 6: Accidental Release Measures

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

### Section 7: Handling and Storage

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

Storage: Product is temperature sensitive. Keep above 10C. Keep away from sources of ignition. Store in a cool, dry, well ventilated area, away from incompatible substances.

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### 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. Protective gloves should be butyl rubber. Wear appropriate protective gloves and clothing to prevent skin contact. Use a NIOSH approved respirator when necessary.

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### Section 9: Physical and Chemical Properties

**Physical State:** Liquid      **Odor:** solvent      **Solubility:** 100%      **Evaporation Rate:** <1  
**Boiling Point:** 144C      **Specific Gravity:** 1      **Vapor Pressure:** 1      PSI @ 21C      **Vapor Density:** 4.07 (Air = 1)      **Ph** n/a

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### Section 10: Stability and Reactivity

**Stability:** Stable at normal temperatures and pressures.

**Conditions To Avoid:** Temperatures over 40C, ignition sources, and incompatible materials.

**Incompatibilities:** Strong oxidizing agents

**Polymerization:** Will not occur.

**Decomposition:** carbon oxides

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### Section 11: Toxicological Information

**Sensitization (effects of repeated exposure):**

Not known to.

**Carcinogenicity (risk of cancer):**

The ingredients of this product are not classified as being carcinogenic by ACGIH (American Conference of Governmental industrial Hygenists) or IARC (International Agency for Research on Cancer), not regulated as carcinogens by OSHA (Occupational Safety and Health Administration), and not listed as carcinogens by NTP (National Toxicology Program)

**Teratogenicity (risk of malformation in an unborn fetus):**

Increased birth defects, fetal lethality, and delayed fetal development has been observed in female animals exposed to air concentrations of 50 ppm.

**Reproductive Toxicity (risk of sterility)**

Known to cause damage to male reproductive organs.

**Mutagenicity (risk of heritable genetic defects)**

Not known to.

**Lethal exposure concentrations:**    **Ingestion(LD50):** 1250 mg/kg (guinea)    **Inhalation(LC50):** n/e      **Skin(LD50):** 5250 mg/kg (rabbit)

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### Section 12: Ecological Information

**General Information:** Avoid runoff into storm sewers and ditches which lead to waterways. Water runoff can cause environmental damage.

**Environmental Impact Data (percentage by weight)**    **CFC:** 0    **HFC:** 0    **Cl.Solv:** 0    **VOC:** 0    **HCFC:** 0    **ODP:** 0

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### Section 13: Disposal Information

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

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### Section 14: Transportation Information

**Ground:**

not regulated

**Air within continental USA**

**Federal Express:**

not regulated

**UPS Air:**

not regulated

**All other air:**

not regulated

**Sea:**

not regulated

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**Section 15: Regulatory Information**

*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 Community 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 depleters.

This product does not contain any class 2 ozone depleting substances.

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, US*

This product contains ethylene glycol monomethyl ether acetate (cas# 110-49-6), known to the state of California to cause birth defects, and other reproductive harm.

*Health Canada*

Labeling and containers used in this product are 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.

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**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 sources to be reliable, 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.

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