

# M.G. Chemicals

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

## Material Safety Data Sheet

Head Office: 9347 - 193 Street, Surrey, B.C., V4N 4E7

Technical Information: 1-800-201-8822 or [info@mgchemicals.com](mailto:info@mgchemicals.com)

Revision Date: 29-septembre-2000 Prepared by: Howard Clark

Emergency: Phone Canutech (613) 996-6666 Collect 24 hrs

For updates please download from [www.mgchemicals.com](http://www.mgchemicals.com) or fax requests to 1-800-708-9888

### Section 1: Product Identification

**Product Code: 418 - liquid**

**Name: Developer**

Use: For developing M.G. Chemicals presensitized boards.

### Section 2: Hazardous Ingredients:

CAS#	Chemical Name	Percentage by weight	ACGIH TWA	Osha Pel	Osha Stel
n/a	dionized water	90 - 96	n/a	n/a	n/a
1310-73-2	sodium hydroxide	4 - 10	2mg/m3	2mg/m3	n/e

### Section 3: Hazards Identification

Eyes: Causes severe eye burns  
Skin: Causes skin burns. May cause deep ulcers of the skin.  
Inhalation: Causes severe irritation of the respiratory tract with coughing, burns, and breathing difficulty.  
Ingestion: Harmful if swallowed. Causes gastrointestinal tract burns.  
Chronic: No effects known.

### 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 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 n/a Flash Point n/a LEL / UEL n/a  
Extinguishing Media: n/a  
General Information: Will not burn.  
NFPA Ratings: Health 2 Flammability 0 Reactivity 1  
HMIS Ratings: Health 3 Flammability 0 Reactivity 1 WHMIS Codes E, D2B

### 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 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: Store in a cool, dry, well ventilated area, away from incompatible substances. Keep from freezing.

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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. Wear appropriate protective 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:	none	Solubility:	miscible	Evaporation Rate:	slow
Boiling Point:	100C	Specific Gravity:	1.1	Vapor Pressure:	1 PSI@21C	Vapor Density:	1(Air=1) Ph: 12

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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. Exposure to moist air or water.

Incompatibilities: Acids, zinc, cinnamaldehyde, chloroform + methane, corrosive to metals.

Polymerization: Will not occur.

Decomposition: Toxic fumes of sodium oxide, sodium peroxide fumes.

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## 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)

No

Mutagenicity: (risk of heritable genetic effects)

No

Lethal Exposure Concentrations:

Ingestion(LD50): n/e

Inhalation (LC50): n/e

Skin (LD50): n/e

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## 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: 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 damage.

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## Section 14: Transportation Information

Ground:

Consumer Commodity, ORM-D

Air within continental USA:

Federal Express:

Complete Fed Ex dangerous goods declaration, Shipping name - Consumer Commodity, Class - ORM-D, UN # - n/a (leave blank), Packing Group - n/a (leave blank), Sub Risk - n/a (leave blank), Packing Instructions - n/a (leave blank), Authorization - n/a (leave blank). Use M.G. Chemicals UN certified outer carton.

A double arrow orientation label is required and is already printed on the original outer carton. Change the ORM-D marking on the outer carton to ORM-D-AIR, Tape all seams on the carton.

UPS:

Complete UPS forms marked "Hazardous Materials Shipping Paper" and "Shipper's Certification for Hazardous Materials" with the following information: Shipping Name - Consumer Commodity, Hazard Class - ORM-D, Label Type - ORM-D-AIR..Use M.G. Chemicals UN certified outer carton. Change the ORM-D marking on the outer carton to ORM-D-AIR, Tape all seams on the carton. Refer to UPS guide for shipping hazardous materials.

All other air:

Shipping Name - Consumer Commodity, Class 9, ID# 8000, Packing Group - n/a (leave blank), Sub risk - n/a (leave blank), Packing instruction - 910, Authorization - n/a (leave blank), Emergency - phone (613) 996-6666 collect. Use M.G. Chemicals UN certified outer carton. A double arrow orientation label is required and is already printed on the original outer carton. Add a class 9 diamond label to outer carton, and mark ID# 8000 below consumer commodity. Tape all seams. For further information refer to IATA regulations, or phone M.G. Chemicals technical service at 1-800-201-8822

Sea - All Sizes

Shipping Name - Sodium Hydroxide Solution, Class 8, UN# 1824, Packing Group - III, Vessel Storage - may be stowed on deck or under deck on a cargo vessel or on a passenger vessel. Use M.G. Chemicals UN certified outer carton. Hazard Label required - Corrosive. A double arrow orientation label is required and is already printed on the original outer carton. Tape all seams. Emergency - phone (613) 996-6666 collect. For further information refer to IMO regulations or phone M.G. Chemicals technical service at 1-800-201-8822.

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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 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 depleters.

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.

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 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.

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