

Material Safety Data Sheet

Revision Date March 3, 2009	Prepared by Patti Rogers	Technical Information 1-800-201-8822 or support@mgchemicals.com
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Section 1: Product Identification

MSDS Code: 41601

Name: Alkaline Cleaner

Related Part Numbers: 41601-250ML

Use: For use in tank # 1 in the MG Electroless Copper-Plating System.

Section 2: Hazardous Ingredients

CAS#	Chemical Name	Percentage by weight	ACGIH TWA	Osha Pel	Osha Stel
102-71-6	Triethanolamine	12-13%	N/E	N/E	N/E

Section 3: Hazards Identification

Eyes:	May cause irritation, pain and reddening.
Skin:	May cause reddening, discomfort, and irritation.
Inhalation:	May irritate the nose, throat and lungs
Ingestion:	Harmful if swallowed and can cause irritation of the mouth, throat and esophagus.
Chronic:	Persistent irritation, allergic dermatitis and eczema may result from repeated exposures to this product.

Section 4: First Aid Measure

Eyes:	Remove contact lenses. Flush with plenty of water. Get medical aid.
Skin:	Wash skin with soap and water. Get medical aid.
Inhalation:	Immediately remove from exposure to fresh air.
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:	Water spray, Foam, Halon, CO2, Dry chemical, any "ABC" class.				
General Information:	When involved in a fire this material may decompose and produce irritating vapors and toxic gases.				

Section 6: Accidental Release Measures

Spill Procedure:	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.
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Section 7: Handling and Storage

Handling:	Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale.
Storage:	Keep away from direct sunlight, sources of heat and freezing temperatures.

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. Wear Neoprene, butyl or natural rubber gloves. Use a NIOSH approved respirator when necessary.

Section 9: Physical and Chemical Properties

Physical State:	Clear Liquid	Odor:	Ammonia	Solubility in water:	Completely	Evaporation Rate:	Similar to water	
Boiling Point:	95°C	Specific Gravity:	(Water=1) 1.02 @25°C	Vapor Pressure:	N/E	Vapor Density:	N/E	pH: 9-10

Section 10: Stability and Reactivity

Stability: Stable in normal conditions & temperatures.
Conditions to avoid: Contact with incompatible materials.
Incompatibilities: Strong Acids, strong oxidizers.
Polymerization: Will not occur.
Decomposition: Ammonia, Carbon monoxide, Carbon dioxide, Nitrogen oxides.

Section 11: Toxicological Information

Sensitization: (effects of repeated exposure)	Not known to			
Carcinogenicity: (risk of cancer)	Not known to			
Teratogenicity: (risk of malformation in an unborn fetus)	Not known to			
Reproductive Toxicity: (risk of sterility)	Not known to			
Mutagenicity: (risk of heritable genetic effects)	Not known to			
Lethal Exposure Concentrations:	Ingestion (LD50):	Inhalation (LC50):	Skin (LD50):	Inhalation (TCLo):
Triethanolamine	2200 mg/kg Rabbit	N/A	16 mL/kg Rat	N/A

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: 0%

Volatile Organic Compounds, grams per litre: 0g/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: (all sizes 1 liter or less)
 Non Regulated

Air:
 Non Regulated

Sea:

Non Regulated

Section 15: Regulatory Information Cont..

CANADA

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 is in compliance.

WHMIS

This product belongs to the following categories: **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 does not contain toxic chemicals subject to the reporting requirements of section 313 of Title III of the superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372

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

This product does not contain 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.

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

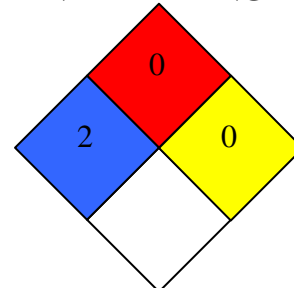
This product does not contain any chemicals listed.

HMIS RATING

HEALTH:	2
FLAMMABILITY:	0
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.