



MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Gagekote 8

November 28, 2005

Vishay Micro-Measurements
Post Office Box 27777
Raleigh, NC 27611

MSDS # MGM064A

919-365-3800

CHEMTREC 1-800-424-9300 (U.S.)
703-527-3887 (Outside U.S.)

NOTE: CHEMTREC numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

CAS NUMBER	CHEMICAL IDENTITY	%
108-88-3	Toluene	47-53
78-93-3	Methyl Ethyl Ketone	13-18
Not Available	Acrylic Polymer	32-38
Not Available	Optical Brightener	<1

SECTION 3: HEALTH HAZARD DATA

Routes of Entry:

Inhalation: Yes **Skin:** Yes **Ingestion:** Accidental

Health Hazards (Acute and Chronic): May cause irritation to eyes, skin, and respiratory system.

Carcinogenicity: NTP: Not listed
 IARC Monographs: Not listed
 OSHA Regulated: Not listed

Signs and Symptoms of Exposure:

INHALATION: Causes central nervous system depression. Mild exposure causes dizziness, weakness, headache, nausea, etc. More severe exposures, greater than approximately 1000 ppm, may cause respiratory depression, convulsions and death. Cardiac arrhythmias, including fatal ventricular fibrillation, may occur. (Inhalation - RAT LC_{LO} 4000 ppm/ 4 hrs). Olfactory detection level is 50 ppm. However, sense of smell is dulled by continuous exposure, so unsatisfactory as a means of detection.

EYE CONTACT: Short-term contact may result in slight eye irritation and conjunctivitis. Prolonged contact with liquid can result in corneal burns. High vapor concentrations (approximately 1000 ppm) are irritating to the eyes.

SKIN CONTACT: Prolonged and repeated liquid contact can cause defatting and drying of the skin, which may result in skin irritation and dermatitis. Skin absorption may add significantly to exposure.

INGESTION: Moderately toxic. Causes burning sensation in mouth and stomach and is likely to produce symptoms similar to those described for inhalation. More serious hazard posed by vomiting after swelling resulting in aspiration (breathing) of vomitus into lungs, which may result in chemical pneumonitis and pulmonary edema/hemorrhage, and may be fatal.

Conditions Generally Aggravated by Exposure: Not known.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention immediately.

EYE CONTACT: Flush with water for 15 minutes while holding eyelids open. Get medical attention.

SKIN CONTACT: Flush with water while removing contaminated clothing and shoes. Follow by washing with soap and water. Do not reuse clothing or shoes until properly cleaned. If irritation persists, get medical attention.

INGESTION: Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Get medical attention immediately.

NOTE TO PHYSICIAN: If more than 2 ml/kg has been ingested, and vomiting has not occurred, emesis should be induced with supervision. Keep victim's head below hips to prevent aspiration. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage using a cuffed endotracheal tube should be considered.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 30°F (-1.1°C) (Tag Closed Cup)

Flammable limits: LEL: 1.6 UEL: 11.2

Extinguishing Media: Foam, carbon dioxide and dry chemical.

Special Firefighting Procedures: Fight as a flammable liquid fire. Wear self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Vapor is flammable and heavier than air and may travel to source of ignition and flash back.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Absorb with inert material (sand, vermiculite, etc.). Large spills may be scooped up with non-sparking tools. Remove sources of ignition. Provide ventilation and/or respiratory protection.

SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

Respiratory Protection: Use NIOSH approved organic vapor type respirator if TLV is exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical: Explosion Proof

Special: Designed and maintained to provide volume and patterned to prevent vapor.

Other:

Protective Gloves: Use gloves that are impervious to chemical and petroleum.

Eye Protection: Chemical type goggles must be worn.

Other Protective Clothing or Equipment: As needed to prevent contact.

Work / Hygienic Practices: Use good industrial hygiene practice. Wash hands using soap and water after use and before eating, drinking, or smoking. Wash contaminated clothing before reuse.

SECTION 8: HANDLING AND STORAGE

Precautions to be taken in handling and storing: Keep away from heat, sparks and open flames. Store at ambient temperature. Ground to protect from static charge. Keep containers closed. Use adequate ventilation.

Other Precautions: None known.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	180°F (82.2°C)
Vapor Pressure (mmHg):	45.4
Vapor Density (Air = 1):	4.0
Specific Gravity (H₂O = 1):	0.88
Melting Point:	NA
Evaporation Rate (BuAc = 1):	3.62
Volatile Organic Compounds:	592 grams/liter
Solubility in Water:	Negligible (less than 0.1%)

Appearance and Odor: Water clear, low viscosity liquid, aromatic odor.

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: Stable.

Conditions to Avoid: Heat, sparks, open flame.

Incompatibility (Materials to Avoid): Avoid contact with strong oxidizing agents.

Hazardous Decomposition or By-products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Toluene

OSHA PEL:	200 ppm / 300 ppm Ceiling / 500 ppm (10 min max. peak)
ACGIH TLV:	100 ppm / 375 mg/m ³ / 150 ppm STEL
OTHER:	ORAL - Rat LD ₅₀ 636 mg/kg SKIN - Rabbit LD ₅₀ 14100 ul/kg INHALATION - Rat LC ₅₀ : 49 gm/m ³ - 4 hours

Methyl Ethyl Ketone

OSHA PEL:	200 ppm / 590 mg/m ³
ACGIH TLV:	200 ppm / 300 ppm STEL
OTHER:	ORAL - Rat LD ₅₀ : 2737 mg/kg INHALATION - Rat LC ₅₀ : 23500 mg/m ³ - 8 hour SKIN - Rabbit LD ₅₀ : 6480 mg/kg

SECTION 12: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with local, state, and federal environmental regulations.

SECTION 13: TRANSPORTATION INFORMATION

SHIPPING NAME	CLASS	PACKING GROUP	UN NUMBER
Paint	3	II	1263

SECTION 14: REGULATORY INFORMATION**SECTION 313 SUPPLIER NOTIFICATION:**

This product contains a toxic chemical or chemicals (as listed below) subject to the reporting requirements of Section 313 Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

CAS NUMBER	CHEMICAL NAME	% BY WEIGHT
108-88-3	Toluene	47-53
78-93-3	Methyl Ethyl Ketone	13-18

TSCA NOTIFICATION:

All components of this product are listed in the Toxic Substance Control Act Chemical Substance Inventory (TSCA).

SECTION 15: OTHER INFORMATION

To the best of our knowledge, the information provided above meets the requirements of the United States Occupational Safety and Health Act and regulations established under 29 CFR 1910.1200 (g)(2)(c)(1)-(4) for a mixture of hazardous chemicals which has not been tested as a whole. The data provided on this Material Safety Data Sheet is from manufacturers of the original components. Vishay Micro-Measurements specifically disclaims any and all form of liability and/or responsibility for the application of this product.