



# MATERIAL SAFETY DATA SHEET



## SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: QA-500 Part A

April 13, 2010

Vishay Measurements Group, Inc.  
Post Office Box 27777  
Raleigh, NC 27611

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	%
25068-38-6	Bisphenol A/Epichlorohydrin Based Epoxy Resin	70-100
122-60-1	Oxirane (phenoxymethyl)	<6 ppm

## SECTION 3: HEALTH HAZARD DATA

### Routes of Entry:

Inhalation: Yes      Skin: Yes      Ingestion: Accidental

Health Hazards (Acute and Chronic): May cause allergic skin reaction.

Carcinogenicity:      NTP:                      See Note  
                                 IARC Monographs:      See Note  
                                 OSHA Regulated:        See Note

NOTE: The International Agency for Research on Cancer (IARC) concluded that diglycigyl ether of bisphenol A is not classifiable as a carcinogen (IARC Group 3), that is human and animal evidence of carcinogenicity is inadequate.

**Signs and Symptoms of Exposure:**

**INHALATION:** This material does not normally present an inhalation hazard, however, in airborne applications where vapors (caused by high temperature) or mists (caused by mixing) are created, breathing may cause a mild burning sensation in the nose, throat and lungs.

**EYE CONTACT:** May cause temporary discomfort or irritation to the eye. Contact with hot material can cause thermal burns which may result in permanent damage or blindness.

**SKIN CONTACT:** May be slightly irritating to the skin. Repeated skin contact may result in an allergic skin reaction causing itching, burning, redness and swelling. Contact with hot material can cause thermal burns which may result in permanent damage.

**INGESTION:** Not expected to be a relevant route of exposure.

**Conditions Generally Aggravated by Exposure:** None known.

<b>SECTION 4: EMERGENCY AND FIRST AID PROCEDURES</b>
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**INHALATION:** Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loose tight clothing such as collar, tie, belt or waistband.

**EYE CONTACT:** Cool the exposed area by flushing with large amounts of water. Flush eyes with water while holding eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision, or swelling persists, consult a physician. Transport to nearest medical facility for additional treatment.

**SKIN CONTACT:** If contact with hot material, cool the burn area by flushing with large amounts of water. Wipe off excess material from exposed area. Flush exposed area with water and follow by washing with soap if available. Do NOT attempt to remove anything from the burn area or apply burn creams or ointments. Cover the burn area loosely with a sterile dressing, if available. Transport to nearest medical facility for additional treatment.

**INGESTION:** Do NOT induce vomiting. Have victim rinse mouth out with water, then drink sips of water to remove taste from mouth. In general, no treatment is necessary unless large quantities are swallowed, however, get medical advice. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Never give anything by mouth to an unconscious person.

<b>SECTION 5: FIRE AND EXPLOSION HAZARD DATA</b>
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**Flash Point (Method Used):** 484°F (251°C) PMCC

**Flammable limits:** LEL: NA UEL: NA

**Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide to extinguish flames.

**Special Firefighting Procedures:** Material will not burn unless preheated. Clear fire area of all non-emergency personnel. Do not enter confined fire space without full bunker gear (helmet with faceshield, bunker coats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus. Cool surrounding equipment, fire-exposed containers and structures with water. Container areas exposed to direct flame contact should be cooled with large quantities of water to prevent weakening of container structure.

**Unusual Fire and Explosion Hazards:** None known.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Steps to be taken if material is released or spilled:** Use cautious judgement when cleaning up large spills. Shut off source of leak if safe to do so. Dike and contain spill. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly. Flush area with water to remove trace residue. Place in container for proper disposal. Prevent entry into waterways, sewer, basements or confined areas.

#### SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

**Respiratory Protection:** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

**Ventilation:** Use only with adequate ventilation. If user operations generate dusts, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Protective Gloves:** Use chemical resistant gloves.

**Eye Protection:** Use chemical goggles or safety glasses if liquid contact is likely.

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

**Work / Hygienic Practices:** Wash hands thoroughly after use and before eating, drinking, or smoking. Launder contaminated clothing before reuse.

#### SECTION 8: HANDLING AND STORAGE

**Precautions to be taken in handling and storing:** Avoid prolonged or repeated contact with eyes, skin and clothing. Avoid contact with eyes, skin and clothing. Keep containers closed when not in use. Store in a cool, dry place with adequate ventilation.

**Other Precautions:** Keep away from open flames and high temperatures. Avoid contact with hot liquid to prevent thermal burns.

<b>SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES</b>
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<b>Boiling Point:</b>	>500°F
<b>Vapor Pressure (mmHg):</b>	0.03 @ 171°F (77°C)
<b>Vapor Density (Air = 1):</b>	Unknown
<b>Specific Gravity (H<sub>2</sub>O = 1):</b>	1.17
<b>Melting Point:</b>	Unknown
<b>Evaporation Rate (BuAc = 1):</b>	Unknown
<b>Volatile Organic Compounds:</b>	Unknown
<b>Solubility in Water:</b>	Negligible

**Appearance and Odor:** Clear viscous liquid.

<b>SECTION 10: STABILITY AND REACTIVITY DATA</b>
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**Stability:** Material is stable under normal conditions.

**Conditions to Avoid:** Avoid high temperatures.

**Incompatibility (Materials to Avoid):** Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids, and strong mineral and organic bases. Avoid contact with water or liquids. Do not allow molten material to contact water or liquids as this can cause violent eruptions, splatter hot material, or ignite flammable material.

**Hazardous Decomposition or By-products:** Reaction with some curing agents may produce considerable heat and possible violent decomposition.

**Hazardous Polymerization:** Will not occur.

<b>SECTION 11: TOXICOLOGICAL INFORMATION</b>
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Bisphenol A/Epichlorohydrin Based Epoxy Resin

OSHA PEL:	Not listed
ACGIH TLV:	Not listed
OTHER:	DERMAL (Rabbit) LD <sub>50</sub> 19.8 mg/kg
	ORAL (Rat) LD <sub>50</sub> 30,000 mg/kg

<b>SECTION 12: DISPOSAL CONSIDERATIONS</b>
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**Waste Disposal Method:** Dispose of in accordance with local, state, and federal environmental regulations.

<b>SECTION 13: TRANSPORTATION INFORMATION</b>
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SHIPPING NAME	CLASS	UN NUMBER
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Not classified as hazardous for transportation.

**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.

<b>CAS NUMBER</b>	<b>CHEMICAL NAME</b>	<b>% BY WEIGHT</b>
Not listed		

**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. Micro-Measurements specifically disclaims any and all form of liability and/or responsibility for the application of this product.