



# MATERIAL SAFETY DATA SHEET



## SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: PL-8

April 14, 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 Diglycidyl Ether	84.0
84-74-2	Dibutylphthalate	16.0
106-89-8	Epichlorohydrin	2-3 ppm

\*NOTE: CAS # 25068-38-6 is an epoxy resin produced by the condensation reaction of epichlorohydrin and bisphenol A. The epichlorohydrin is consumed in the process and residual levels are controlled to 2-3 ppm maximum.

## SECTION 3: HEALTH HAZARD DATA

### Routes of Entry:

Inhalation: Yes    Skin: Yes    Ingestion: Yes

**Health Hazards (Acute and Chronic):** May cause eye and respiratory irritation and allergic skin reactions. Epichlorohydrin has been reported to produce cancer in laboratory animals and epidemiological studies present "weak" evidence of cancer risk to humans.

<b>Carcinogenicity:</b>	NTP:	See Note
	IARC Monographs:	See Note
	OSHA Regulated:	Not listed

**NOTE:** International Agency for Research on Cancer (IARC) has classified epichlorohydrin as a possible human carcinogen (IARC GROUP 2A) based on the following conclusions: Human Evidence - Inadequate; Animal Evidence - Sufficient. Epichlorohydrin has also been classified by National Toxicology Program (NTP) as an anticipated carcinogen (NTP GROUP 2B) based on sufficient evidence of carcinogenicity from studies in experimental animals.

**Signs and Symptoms of Exposure:**

**INHALATION:** May cause respiratory irritation.

**EYE CONTACT:** May cause eye irritation.

**SKIN CONTACT:** May cause allergic skin reactions.

**INGESTION:** In animal studies, a component in this product has affected the testes, female reproductive capacity and the developing fetus. May also cause nausea, vertigo, photophobia and blood and protein in the urine from ingesting a large single dose.

**Conditions Generally Aggravated by Exposure:** Allergy, eczema, or existing skin condition.

<b>SECTION 4: EMERGENCY AND FIRST AID PROCEDURES</b>
--

**INHALATION:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention. If breathing is difficult, transport to medical care and, if available, give supplemental oxygen.

**EYE CONTACT:** For eye contact, immediately flush eyes with water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. Get immediate medical attention.

**SKIN CONTACT:** For skin contact, wipe away excess material with dry towel. Then wash affected areas with plenty of water, and soap if available, for several minutes. Get medical attention if irritation occurs. Remove contaminated clothing.

**INGESTION:** If swallowed, give at least 3-4 glasses of water but do NOT induce vomiting. Do not give anything by mouth to an unconscious or convulsing person.

<b>SECTION 5: FIRE AND EXPLOSION HAZARD DATA</b>
--

**Flash Point (Method Used):** 400°F (204°C) Closed Cup

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

**Extinguishing Media:** Carbon dioxide, foam, dry chemical, water spray.

**Special Firefighting Procedures:** Firefighters should wear proper protective equipment and self-contained breathing apparatus with full-faceshield operated in the positive pressure mode. Move containers from fire area if it can be done safely. Use water to keep fire exposed containers cool.

**Unusual Fire and Explosion Hazards:** Decomposition and combustion products may be toxic.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Steps to be taken if material is released or spilled:** Absorb onto sand or other absorbent material. Shovel into closable container for disposal. Wear protective equipment to prevent skin contact. Flush contaminated area with water.

## SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

**Respiratory Protection:** Avoid prolonged or repeated breathing of vapors or mists. Wear a properly fitted NIOSH approved respirator whenever exposure to vapor/mist is likely unless levels are below applicable limits.

### Ventilation:

**Local Exhaust:** NA

**Mechanical:** Good general mechanical ventilation recommended.

**Special:** NA

**Other:** Organic chemical cartridge respirator, if needed.

**Protective Gloves:** Wear impervious gloves.

**Eye Protection:** Splash-proof chemical goggles or complete faceshield.

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

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

## SECTION 8: HANDLING AND STORAGE

**Precautions to be taken in handling and storing:** Avoid contact with eyes, skin, and clothing. Avoid breathing vapor, mist, or spray. Use only with good ventilation. Store in dry area in closed containers.

**Other Precautions:** Warning! Can cause skin sensitization and irritation. May have effect on reproduction and the developing fetus.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Boiling Point:	<395°F (200°C)
Vapor Pressure (mmHg):	Not known
Vapor Density (Air = 1):	Not known
Specific Gravity (H <sub>2</sub> O = 1):	1.13
Melting Point:	Not known
Evaporation Rate (BuAc = 1):	Not known
Volatile Organic Compounds:	None
Solubility in Water:	Insoluble

**Appearance and Odor:** Light colored liquid, slight aromatic odor.

**SECTION 10: STABILITY AND REACTIVITY DATA**

**Stability:** Stable.

**Conditions to Avoid:** Elevated temperatures.

**Incompatibility (Materials to Avoid):** Strong oxidizing agents and nitrates. Strong acids or bases in bulk.

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

**Hazardous Polymerization:** Will not occur.

**SECTION 11: TOXICOLOGICAL INFORMATION**

Bisphenol A Diglycidyl Ether

OSHA PEL:	Not established
ACGIH TLV:	Not established
OTHER:	ORAL (RAT) LD <sub>50</sub> 11.4 g/kg ORAL (MOUSE) LD <sub>50</sub> 15.6 g/kg SKIN (RABBIT) LD <sub>50</sub> >20 ml/kg

Dibutylphthalate

OSHA PEL:	5 mg/m <sup>3</sup> TWA
ACGIH TLV:	5 mg/m <sup>3</sup> TWA
OTHER:	Not established

Epichlorohydrin

OSHA PEL: 2 ppm SKIN  
 ACGIH TLV: 0.5 ppm SKIN  
 OTHER: Potential contribution to overall exposure is possible by skin absorption.

**SECTION 12: DISPOSAL CONSIDERATIONS**

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

**SECTION 13: TRANSPORTATION INFORMATION**

SHIPPING NAME	CLASS	PACKING GROUP	UN NUMBER
Toxic Liquid, Organic, N.O.S. (Bisphenol A/Dibutylphthalate)	6.1	III	2810

**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
84-74-2	Dibutylphthalate	16.0
106-89-8	Epichlorohydrin	2-3 ppm

**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.