



MATERIAL SAFETY DATA SHEET



SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: PC-1T

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	%
25036-25-3*	Epichlorohydrin/Bisphenol A Resin	>51.7
7429-90-5	Aluminum Powder	<17.2
26523-14-8	Glycol Adipate Ester	2.6
122-60-1	Phenyl Glycidyl Ether	4.3
112945-52-5**	Silica, Amorphous, Fumed, Crystalline Free	6.9
106-89-8	Epichlorohydrin	<0.01

*NOTE: CAS # 25036-25-3 is an epoxy resin produced by the condensation reaction of epichlorohydrin and bisphenol A. The epichlorohydrin is consumed in the process and the residual levels are controlled to 2-3 ppm maximum.

**Listed in TSCA under its former CAS # 7631-86-9.

SECTION 3: HEALTH HAZARD DATA

Routes of Entry:

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

Health Hazards (Acute and Chronic): May be irritating to eyes, skin and immune system. May cause allergic reaction in some individuals.

Carcinogenicity: NTP: Yes*
 IARC Monographs: Yes*
 OSHA Regulated: NA

*NOTE: Epichlorohydrin is listed as a possible carcinogen in NTP and IARC Monographs. Epichlorohydrin has been reported to produce cancer in laboratory animals and epidemiological studies present "weak" evidence of cancer risk to humans. Phenyl Glycidyl Ether is a cancer suspect agent. Phenyl Glycidyl Ether has been reported to produce nasal cancer in a life-time rat inhalation study at 12 ppm but not at 1 ppm. It has been classified by the International Agency for Research on Cancer (IARC) as a 2B carcinogen based on the following conclusions: Human evidence-limited; animal evidence-sufficient.

Signs and Symptoms of Exposure:

INHALATION: Under normal conditions, no adverse effects are expected. Overexposure to Phenyl Glycidyl Ether may cause irritation to the nose, throat and respiratory tract and possible central nervous system depression.

EYE CONTACT: Contact with the eye tissues can cause moderate to severe irritation.

SKIN CONTACT: Prolonged or repeated contact can cause defatting and drying of the skin which may result in skin irritation and dermatitis. May cause allergic skin reaction in some individuals.

INGESTION: Product is moderately toxic and may be harmful if swallowed. May cause central nervous system depression.

Conditions Generally Aggravated by Exposure: Individuals with medical conditions involving the skin or immune system, or who have specific chemical allergies, may be more susceptible to the possible effects produced by overexposure.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Exposure by inhalation does not normally produce adverse effects. However, if overexposure occurs, remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Seek medical advice.

EYE CONTACT: Flush eyes with a steady stream of water for at least 15 minutes. Lift upper and lower lids frequently. Get prompt medical attention.

SKIN CONTACT: Remove contaminated clothing and shoes. Wash affected area with mild soap and plenty of water. If irritation develops, consult a physician. Wash contaminated clothing before re-use.

INGESTION: Call a poison control center, emergency room or physician. Unless advised otherwise, induce vomiting by giving either Syrup of Ipecac followed by two glasses of water or by sticking finger down throat.

NOTE TO PHYSICIAN: No specific antidote is known. Therapy is directed at preventing absorption, administering to the symptoms as they occur, and providing supportive therapy.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): >200°F (93°C) Setaflash Closed Cup

Flammable limits: LEL: Not known UEL: Not known

Extinguishing Media: For small fires use foam, carbon dioxide, dry chemical, or water spray. For large fires use foam, water spray or fog.

Special Firefighting Procedures: Remove all ignition sources. Wear self-contained breathing apparatus and complete personal protective equipment when entering confined areas where potential for exposure to vapors or products of combustion exists.

Unusual Fire and Explosion Hazards: Closed containers may rupture when exposed to extreme heat.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Stop discharge and contain spill or contaminated material using a dike or barrier. Place contaminated material in a suitable container for further handling and disposal. Appropriate safety measures and appropriate protective equipment should be used. Do not flush to sewer, stream, or other bodies of water.

SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

Respiratory Protection: Where exposure exceeds established airborne limits, use a NIOSH approved respirator, or a self-contained breathing apparatus, or a supplied air respirator as necessary to control exposure. Local exhaust is recommended when there may be a possible release of vapors, mists or dusts.

Protective Gloves: Wear chemical resistant gloves.

Eye Protection: Chemical splash goggles or safety glasses with sideshields.

Other Protective Clothing or Equipment: Wear protective clothing as needed to prevent skin contact.

Work / Hygienic Practices: Wash thoroughly after handling. Contaminated clothing and shoes must be thoroughly cleaned before re-use.

SECTION 8: HANDLING AND STORAGE
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Precautions to be taken in handling and storing: Store in a cool, dry, well ventilated area. Do not store above 100°F.

Other Precautions: Avoid contact with eyes, skin, and clothing. Heating can generate vapors. Use appropriate ventilation or approved respirators as necessary.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
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Boiling Point:	>370°F (188°C)
Vapor Pressure (mmHg):	<1
Vapor Density (Air = 1):	>1
Specific Gravity (H₂O = 1):	1.12
Melting Point:	NA
Evaporation Rate (BuAc = 1):	NA
Volatile Organic Compounds:	None
Solubility in Water:	Slightly soluble

Appearance and Odor: Silver liquid; mild odor.

SECTION 10: STABILITY AND REACTIVITY DATA
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Stability: Stable under normal conditions and use.

Conditions to Avoid: Excessive heat.

Incompatibility (Materials to Avoid): Contamination with strong acids, bases, amines, mercaptans, oxidizing agents and ammonia.

Hazardous Decomposition or By-products: If heated to high temperatures this product may emit phenolics, smoke, soot, carbon dioxide, carbon monoxide.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION
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Epichlorohydrin/Bisphenol A Resin

OSHA PEL:	Not established
ACGIH TLV:	Not established
OTHER:	None

PC-1T MSDS (Continued)

Aluminum Powder

OSHA PEL: 5 mg/m³ (Respirable Fraction)
ACGIH TLV: 10 mg/m³ (Total Particulate)
OTHER: Due to this product's physical composition, the release or generation of dust is not expected to occur under normal conditions of use.

Glycol Adipate Ester

OSHA PEL: Not established
ACGIH TLV: Not established
OTHER: Not established

Phenyl Glycidyl Ether

OSHA PEL: 1 ppm TWA
ACGIH TLV: 1 ppm TWA
OTHER: ORAL (RAT) LD₅₀ 3.85 g/kg
ORAL (MOUSE) LD₅₀ 1.4 g/kg
SKIN (RAT) LD₅₀ 2.16 g/kg
SKIN (MOUSE) LD₅₀ 2.99 g/kg
INHALATION (RAT) LC₅₀ >100 ppm (8hr)
INHALATION (MOUSE) LC₅₀ >100 ppm (4hr)

Silica, amorphous, fumed, crystalline free

OSHA PEL: Not established
ACGIH TLV: 10 mg/m³ (DUST)
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
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Waste Disposal Method: Dispose of in accordance with local, state and federal environmental regulations.

SECTION 13: TRANSPORTATION INFORMATION

SHIPPING NAME	CLASS	UN NUMBER
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Not regulated when shipped alone.

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
7429-90-5	Aluminum Powder	8.6
106-89-8	Epichlorohydrin	<0.01

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.