

# MATERIAL SAFETY DATA SHEET



## SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT**: PCH-10/PCH-10C

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	%		
111-40-0	Diethylenetriamine	66.7		
90-72-2	Tris-2,4,6-(Dimethylaminomethyl) Phenol	33.3		

## SECTION 3: HEALTH HAZARD DATA

#### Routes of Entry:

Inhalation: Yes Skin: Yes Ingestion: Yes

**Health Hazards (Acute and Chronic):** Prolonged or repeated exposure may cause sensitization in some individuals. Repeated skin contact can cause allergic dermatitis. Sensitization of respiratory tract which occurs less readily can give subsequent allergic asthma and other effects.

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

# PCH-10/PCH-10C MSDS (Continued)

## Signs and Symptoms of Exposure:

**INHALATION**: Vapors and mists may be corrosive to the upper respiratory tract. Repeated exposure can result in lung damage. Lung damage (scarring, bronchitis, emphysema) may be evidenced by shortness of breath, especially on exertion. Inhalation of vapors may cause irritation in the respiratory tract resulting in coughing and chest pain.

**EYE CONTACT**: May cause severe eye irritation and pain. May cause burns, necrosis and permanent injury. Burns of the eye may cause blindness. Vapors may be irritating.

**SKIN CONTACT**: Corrosive to the skin. May cause skin sensitization. Skin sensitization may be evidenced by rashes, especially hives. May be toxic if absorbed through the skin.

**INGESTION**: Not expected to be a relevant route of exposure. However, corrosive and may cause severe and permanent damage to mouth, throat and stomach. Ingestion may cause bleeding of the gastrointestinal tract and the vomiting of blood. Prevent aspiration of vomit.

**Conditions Generally Aggravated by Exposure**: Pre-existing eye, skin, and respiratory disorders may be aggravated by exposure to this product.

#### 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.

**EYE CONTACT**: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Rinse continuously while on the way to get medical attention.

**SKIN CONTACT**: Immediately remove contaminated clothing and/or shoes. Wipe excess from skin and flush with plenty of water for at least 15 minutes. Follow by thoroughly washing with soap and water. Do not reuse clothing until thoroughly decontaminated. Call a physician.

**INGESTION:** DO NOT induce vomiting. Give large quantities of water to dilute material. Call a physician.

NOTE TO PHYSICIAN: This product contains material that is highly injurious to all tissues, similar to that of ammonia or ammonia gas. Chemical pneumonitis, pulmonary edema, laryngeal edema and delayed scarring of the airway or other affected tissues may occur following exposure. There is no specific treatment. Clinical management is based on supportive treatment which is similar to that for thermal burns.

#### SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 215°F (102°C) PMCC

Flammable limits: LEL: 1.9 UEL: 11.9

# PCH-10/PCH-10C MSDS (Continued)

**Extinguishing Media**: Use water fog, alcohol foam, dry chemical or carbon dioxide. Water or fog may cause frothing which may be violent, especially if sprayed into containers of hot or burning liquid.

**Special Firefighting Procedures**: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Move containers from fire area if it can be done safely. Fire exposed sealed containers may rupture due to build up of internal pressure. Water spray may be used to cool fire exposed containers.

**Unusual Fire and Explosion Hazards**: Delayed lung damage (pulmonary edema) can be experienced after exposure to combustion products, sometimes hours after the exposure. Nitrogen oxides and nitrogen containing organic compounds may be released upon combustion. Sudden reaction and fire may result if product is mixed with an oxidizing agent.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Steps to be taken if material is released or spilled**: Wear appropriate respirator and full protective clothing. Material is corrosive. Prevent all bodily contact with spilled material. Avoid contact with liquids and vapors. Shut off leak if it is safe to do so. Eliminate potential fire hazards. Dike and contain. Soak up residue with clay, sand, or other suitable material. Place in non-leaking containers for proper disposal.

# SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

**Respiratory Protection**: Do not breathe vapors/mists. If exposure may or does exceed occupational exposure limits use a NIOSH approved respirator to prevent overexposure. Use either a fullface, atmosphere supplying respirator or air purifying respirator for organic vapors. Avoid breathing vapors which may be produced under some conditions such as heating or applications of uncured material in large surface areas. Avoid breathing aerosols and mists which may be formed by various methods of application.

Ventilation: Use adequate general and local exhaust.

Protective Gloves: Wear chemical resistant gloves.

Eye Protection: Wear chemical splash goggles.

**Other Protective Clothing or Equipment**: Wear protective apron. Emergency eyewash and shower should be located in close proximity to work area.

**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 re-use. Leather articles, including shoes, cannot be decontaminated and should be destroyed.

## SECTION 8: HANDLING AND STORAGE

**Precautions to be taken in handling and storing**: Store in a cool, dry place with adequate ventilation. Keep away from open flames and high temperatures. Do not pressurize drum containers to empty them. Keep away from oxidizers.

**Other Precautions**: Containers, even those that have been emptied, can contain hazardous product residues. Avoid breathing of vapors. Handle in well ventilated work area.

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

>266°F (130°C)	
<1	
Not known	
0.95-1.09	
Not known	
<1	
0%	
Complete	

Appearance and Odor: Yellow to colorless liquid with amine odor.

## SECTION 10: STABILITY AND REACTIVITY DATA

Stability: Stable.

Conditions to Avoid: Avoid exposure to heat and flame.

**Incompatibility (Materials to Avoid):** Can react vigorously with strong oxidizing agents, strong or mineral acids, and strong mineral or organic bases, especially primary and secondary aliphatic amines. Reaction with some curing agents may produce considerable heat.

Hazardous Decomposition or By-products: Nitrogen oxides, carbon monoxide and unidentified organic compounds may be formed during combustion.

Hazardous Polymerization: Will not occur.

# SECTION 11: TOXICOLOGICAL INFORMATION

Diethylenetriamine

OSHA PEL:	1 ppm (SKIN) TWA
ACGIH TLV:	1 ppm (SKIN) TWA
OTHER:	SKIN (RABBIT) LD <sub>50</sub> 1090 mg/kg
	ORAL (RAT) LD <sub>50</sub> 1080 mg/kg
	INHALATION (RAT) LC <sub>50</sub> >300 ppm/8 Hour

## Tris-2,4,6-(Dimethylaminomethyl) Phenol

OSHA PEL:	Not Established
ACGIH TLV:	Not Established
OTHER:	ORAL (RAT) LD <sub>50</sub> 1200 mg/kg
	SKIN (RABBIT) LD <sub>50</sub> 1280 mg/kg
	INHALATION (RAT) LC <sub>50</sub> >0.5 mg/l (1 hour)

#### 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		
Corrosive Liquid, N.O.S. (Diethylenetriamine)	8	III	1760		
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

None

## 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.