

MATERIAL SAFETY DATA SHEET



SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: PSOH-3/RSOH-3 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 %

140-31-8 N-Aminoethylpiperazine 100

SECTION 3: HEALTH HAZARD DATA

Routes of Entry:

Inhalation: Yes Skin: Yes Ingestion: Accidental

Health Hazards (Acute and Chronic): Causes severe eye and skin burns. May cause blindness. Harmful if

swallowed.

Carcinogenicity: NTP: Not listed

IARC Monographs: Not listed OSHA Regulated: Not listed

Signs and Symptoms of Exposure:

INHALATION: May cause irritation of upper respiratory tract.

EYE CONTACT: Believed to be extremely irritating with possible permanent eye injury.

DOCUMENT NO.: 14122 PAGE 1 OF 4 REVISION: G

PSOH-3/RSOH-3 MSDS (Continued)

SKIN CONTACT: Believed to be corrosive; expected to cause severe skin damage with burns and blistering. Toxic effects due to skin absorption possible.

INGESTION: Harmful if swallowed.

Conditions Generally Aggravated by Exposure: None known.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Move to fresh air. If not breathing give artificial respiration. Contact a physician.

EYE CONTACT: Flush thoroughly with water for at least 15 minutes. Get immediate medical attention.

SKIN CONTACT: Immediately remove contaminated clothing and/or shoes and wash affected area with plenty of soap and water. Wash clothing before reuse. Discard contaminated shoes.

INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 205°F (96.1°C)

Flammable limits: LEL: 1.0 UEL: Not determined

Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for person attempting to stop the leak.

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 without risk. Use water to keep fire-exposed containers cool.

Unusual Fire and Explosion Hazards: Ammonia, carbon monoxide, and carbon dioxide may be formed on burning in limited air supply.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Wear appropriate protective equipment to avoid all skin contact. Contain spill if possible. Wipe up or absorb on suitable material and take up with shovel.

SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

Respiratory Protection: Supplied air respiratory protection is recommended for cleaning large spills or upon entry into tanks, vessels, or other confined spaces.

DOCUMENT NO.: 14122 PAGE 2 OF 4 REVISION: G

PSOH-3/RSOH-3 MSDS (Continued)

Ventilation: Local exhaust ventilation recommended.

Protective Gloves: Chemical resistant gloves.

Eye Protection: Chemical splash goggles and faceshield. Do not wear contact lenses.

Other Protective Clothing or Equipment: Wear coveralls, apron, boots, as needed to prevent skin contact.

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

SECTION 8: HANDLING AND STORAGE

Precautions to be taken in handling and storing: Store in a cool, dry, well ventilated area. Keep container closed when not in use.

Other Precautions: Avoid breathing vapor or mist.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 410°F (210°C)

Vapor Pressure (mmHg): 0.05
Vapor Density (Air = 1): 4.4
Specific Gravity (H₂O = 1): 0.987
Melting Point: NA
Evaporation Rate (BuAc = 1): 1
Volatile Organic Compounds: None
Solubility in Water: Soluble

Appearance and Odor: Clear liquid, ammoniacal odor.

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: Stable.

Conditions to Avoid: Extreme heat.

Incompatibility (Materials to Avoid): All nitrates, acids.

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

Hazardous Polymerization: Will not occur.

DOCUMENT NO.: 14122 PAGE 3 OF 4 REVISION: G

SECTION 11: TOXICOLOGICAL INFORMATION

N-Aminoethylpiperazine

OSHA PEL: Not established ACGIH TLV: Not established

OTHER: LD₅₀ ORAL (RAT) 2.15 g/kg

LD₅₀ SKIN (RABBIT) 0.9 g/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

N-Aminoethylpiperazine

Corrosive 8 III 2815

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.