

# Material Safety Data Sheet

Section1. Product Information and Company Identification			
Product name	Diethylene Glycol		
Mol.formula	C4H10O3	Cas no	111-46-6
Mol.wt	106 g/mol	Cat no	D004
Manfacture name	Pioneers for laboratory chemicals		
Brand name	Piochem		
Address	Area 540, Industrial Zone 6 <sup>th</sup> October city Giza, Egypt.		
Website	www.piochem.com		
E-mail	info@piochem.com		
Phone number	+201225728304 , +201023932115		

#### **Section 2.Hazards Identification**

**Appearance**: colorless viscous liquid.

**Caution!** May cause eye and skin irritation. May be harmful if swallowed. May cause central nervous system depression. May cause kidney damage. Hygroscopic (absorbs moisture from the air).

Target Organs: Kidneys, central nervous system, liver.

#### Potential Health Effects

**Eye:** May cause mild eye irritation.

**Skin:** May cause mild skin irritation. May be absorbed through the skin. Passage of diethylene glycol into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

**Ingestion:** May cause liver and kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Human fatalities have been reported from acute poisoning.

**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled. Inhalation of heated or misted form may cause pulmonary edema.

**Chronic:** Adverse reproductive effects have been reported in animals. A long term rat feeding study showed that 1% diethylene glycol in the diet over a 2-year period resulted in slight growth depression, a few calcium oxalate bladder stones, minimal kidney damage, and occasional liver damage. At 4% dietary level, there was increased mortality, a marked depression of growth rate, bladder stones, severe





kidney damage, and moderate liver damage. In addition, bladder tumors appeared rather frequently.

## Section 3.First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treatment options include ipecac/lavage, activated charcoal, cathartics--admisitered within two hours of ingestion. Hemodialysis should be considered in severe intoxication.

# **Section 4. Fire Fighting Measures**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool.

**Extinguishing Media:** Water or foam may cause frothing. Alcohol foam, water fog, carbon dioxide, dry chemical.

Flash Point: 124 deg C (255.20 deg F) Autoignition Temperature: 224 deg C (435.20 deg F) Explosion Limits, Lower: Not available. Upper: Not available. NFPA Rating: (estimated) Health: 1; Flammability: 1; Instability: 0

# Section 5.Accidental Release Measures

#### **General Information:** Use proper personal protective equipment as indicated

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.





### Section 6. Handling and Storage

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Avoid breathing vapors from heated material. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Wash clothing before reuse. Avoid breathing spray or mist

**Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed. Store protected from moisture.

#### **Section 7. Additional Information**

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

