

## Material Safety Data Sheet

Section 1. Product Information and Company Identification			
<b>Product name</b>	Methylamine solution		
<b>Mol.formula</b>	CH <sub>5</sub> N	<b>Cas no</b>	74-89-5
<b>Mol.wt</b>	31.06 g/mol	<b>Cat no</b>	M037
<b>Manufacture name</b>	Pioneers for laboratory chemicals		
<b>Brand name</b>	Piochem		
<b>Address</b>	Area 540, Industrial Zone 6 <sup>th</sup> October city Giza, Egypt.		
<b>Website</b>	www.piochem.com		
<b>E-mail</b>	info@piochem.com		
<b>Phone number</b>	+201225728304 , +201023932115		

### Section 2. Hazards Identification

Appearance: clear, colorless liquid. Flash Point:.

**Danger!** Extremely flammable liquid and vapor. Vapor may cause flash fire. Causes eye and skin burns. Causes digestive and respiratory tract burns. Harmful if inhaled or swallowed. May be harmful if absorbed through the skin. May cause lung damage. May cause liver damage.

**Target Organs:** Liver, respiratory system, eyes, skin.

**Potential Health Effects**

**Eye:** Causes eye burns. May result in corneal injury. May cause chemical conjunctivitis and corneal damage. May cause tearing, conjunctivitis and corneal edema when vapor is absorbed into the tissue of the eye.

**Skin:** Causes skin burns. May be absorbed through the skin. May cause dermatitis. Methylamine is readily absorbed through the skin and may cause malaise, discomfort, injury and death unless treated promptly.

**Ingestion:** Harmful if swallowed. Causes gastrointestinal tract burns.

**Inhalation:** Causes chemical burns to the respiratory tract. May cause pulmonary edema and severe respiratory disturbances. May cause liver abnormalities. Inhalation of methylamine may cause coughing, nausea and pulmonary edema. Allergic or chemical bronchitis was reported in a worker exposed to methylamine in an unpublished report. It is unclear from this report what the actual exposure concentrations were.

**Chronic:** Effects may be delayed. Repeated or prolonged exposure may result in liver disorders and/or adverse effects to respiratory system (like bronchopneumonia), eyes, or skin. Exposure in test animals has caused liver toxicity and abnormalities in blood chemistry and lungs



### Section 3. First Aid Measures

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

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

**Ingestion:** If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively

### 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. Containers may explode in the heat of a fire. Runoff to sewer may create fire or explosion hazard. Extremely flammable liquid and vapor. Vapor may cause flash fire. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

**Extinguishing Media:** Use water spray, dry chemical, or "alcohol resistant" foam.

**Flash Point:** -18 deg C ( -0.40 deg F)

**Autoignition Temperature:** 430 deg C ( 806.00 deg F)

**Explosion Limits, Lower:** 4.90 vol %

**Upper:** 20.70 vol %

**NFPA Rating:** (estimated) Health: 3; Flammability: 3; Instability:

### 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. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Provide ventilation. Approach spill from upwind. Use only non-sparking tools and equipment. Use water spray to cool and disperse vapors, protect personnel, and dilute spills to form nonflammable mixtures. 5% sulfuric acid may be used to neutralize diluted pools.

### Section 6. Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof



tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Discard contaminated shoes. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Do not breathe vapor. Use only with adequate ventilation. Keep away from heat, sparks and flame. Pipes, fittings, pumps, gauges, and other equipment should be made of steel or other material not subject to corrosion by methylamine. Methylamine may attack aluminum, copper, tin, zinc, lead and their alloys as well as rubber and some plastics.

**Storage:** Keep away from sources of ignition. Keep container closed when not in use. Keep from contact with oxidizing materials. Flammables-area. Keep away from acids.

## 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.

