MATERIAL SAFETY DATA SHEET

SECTION I     PRODUCT AND COMPANY IDENTIFICATION

COMMON NAME
Ethylene Glycol & Water

PRODUCT MODEL NUMBER
ETH GLY

PRODUCT USE
Fill Fluid

MANUFACTURER'S NAME
Meriam Instrument

ADDRESS
10920 Madison Ave.

CITY, STATE, ZIP
Cleveland, Ohio  44102

EMERGENCY PHONE NUMBERS
1-800-255-3924 (US), + 01 813 248 0585 (International)

ENGINEERING CONTROL DATA
MSDS - A35808, Rev. M, EO 7393
Drawing – A34038

DATE PREPARED
05-Nov-2014

SECTION II    HAZARDS IDENTIFICATION

ACUTE

EYES
Moderately to severely irritating to the eyes. Vapors may cause eye irritation.

SKIN CONTACT
Mildly irritating to the skin and slightly toxic on prolonged or repeat contact.

INGESTION
May be harmful or fatal if swallowed. May produce central nervous system (CNS) depression, kidney and liver damage which may be fatal.

INHALATION
Vapors are mildly to markedly irritating to the lungs depending on exposure level.

CHRONIC

CHRONIC EFFECTS OF EXPOSURE
Preexisting skin, eye, and respiratory disorders may be aggravated by exposure to this product. Impaired kidney and liver functions from preexisting disorders may be aggravated by exposure to this product.
SECTION III  COMPOSITION/INFORMATION ON INGREDIENTS

1. Chemical Name: Ethylene Glycol *
   CAS No: 107-21-1
   OSHA/PEL: NE
   ACGIH/TLV: 100mg/m³ (C)
   % : 68

2. Chemical Name: Water
   CAS No: 7732-18-5
   OSHA/PEL: NA
   ACGIH/TLV: NA
   % : 32

• This chemical is listed under SARA title III section 313 toxic chemicals and is identified as a hemolytic agent.

SECTION IV  FIRST AID MEASURES

EYES
Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Seek medical attention.

SKIN CONTACT
Remove contaminated clothing and wash off skin with soap and water. Wash contaminated clothes. If irritation develops, contact a physician.

INHALATION
Due to high boiling point, inhalation is not normally a problem. Remove to fresh air.

INGESTION
If conscious, give two glasses of water and induce vomiting by giving 30cc (2 tablespoons) Syrup of Ipecac. If Ipecac is unavailable induce vomiting by touching finger to the back of victim’s throat. Keep victim’s head below hips while vomiting. Take immediately to the hospital.

SECTION V  FIRE FIGHTING MEASURES

FLASH POINT  METHOD USED  FLAMMABLE LIMITS (in Air % by Vol.)  LEL  UEL
250 F  Closed cup  NA  NA

AUTO-IGNITION TEMPERATURE
Not Determined

EXTINGUISHER MEDIA
Water fog, CO₂, Dry Chemical, Foam

SPECIAL FIRE FIGHTING PROCEDURES
Evacuate area of all unnecessary personnel. Use NIOSH/MSHA approved self-contained breathing apparatus and other protective equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Material will not burn unless preheated.
SECTION VI   ACCIDENTAL RELEASE MEASURES

RESPONSE TO SMALL SPILLS
Absorb with non-combustible absorbent material. Dispose of properly, prevent from entering sewers. The product is a non-hazardous waste when spilled material is disposed of defined in Resource Conservation Recovery Act (RCRA) regulations (40CFR261).

WASTE DISPOSAL
Place in an appropriate disposal facility in compliance with Federal, State, and Local regulations.

SECTION VII   HANDLING AND STORAGE

HANDLING AND STORAGE: Skin and eye contact should be avoided as good industrial practice. Wearing of protective gloves and eye protection is recommended. Wash hands and contaminated skin area after handling. Follow all warnings and precautions even after container is emptied. Wash thoroughly after handling or at the end of the shift.

OTHER PRECAUTIONS: Store in cool dry place away from strong oxidizers and acids. Keep container tightly closed when not in use. All handling equipment should be properly grounded to prevent the build-up of electrostatic charges. Storage area should be equipped with a CO2 system. Handle in accordance with good industrial hygiene and safety practices.

SECTION 7 NOTES: Containers should not be opened until ready for use. Use clean non-sparking equipment and tools when handling.

SECTION VIII   EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION

VENTILATION
General (mechanical) room ventilation is generally satisfactory. Special, local ventilation may be needed at points where vapors can be expected to exceed exposure limits.

PROTECTIVE GLOVES
For the best protection wear nitrile, neoprene, PVC or natural rubber gloves.

EYE PROTECTION
Wear chemical goggles if there is likelihood of contact with eyes.

ADDITIONAL PROTECTIVE CLOTHING OR EQUIPMENT
Boots, aprons, or chemical suits should be used when necessary to prevent skin contact. Eye wash fountains and safety showers should be available for emergency use.
SECTION IX  PHYSICAL & CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>238 F</td>
</tr>
<tr>
<td>Specific Gravity (H₂O=1)</td>
<td>1.082</td>
</tr>
<tr>
<td>Vapour Pressure (mmHg)</td>
<td>14</td>
</tr>
<tr>
<td>Vapour Density (Air=1)</td>
<td>2</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>less than 0.01%</td>
</tr>
<tr>
<td>Appearance &amp; Odor</td>
<td>colorless and odorless liquid</td>
</tr>
</tbody>
</table>

SECTION X  STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Stability</th>
<th>Condition to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable</td>
<td>Heat, flames, ignition sources, and other incompatibles.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incompatibility (Materials to Avoid)</th>
<th>Hazardous Decomposition Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep away from strong oxidizing agents</td>
<td>Carbon monoxide and unidentified organic compounds may be formed during combustion.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous Polymerization</th>
<th>Conditions to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will not occur</td>
<td>NA</td>
</tr>
</tbody>
</table>

SECTION XI  TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Chemical Listed as Carcinogen or Potential Carcinogen</th>
<th>National Toxicology Program</th>
<th>I.A.R.C. Monographs</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

SECTION XII  ECOLOGICAL INFORMATION

When released into the soil, this material is expected to readily biodegrade. When released into the soil this material is expected to leach into groundwater. When released into the soil this material is not expected to evaporate significantly.

When released into the water, this material is not expected to evaporate significantly. When released into the water, this material is expected to readily biodegrade. When released into the water this material is expected to have a half-life between 1 and 10 days.

The LC₅₀ 96-hour values for fish are over 100 mg/L.
SECTION XIII DISPOSAL CONSIDERATIONS

Disposal: Dispose of all cleanup materials in accordance with all Local, State, and Federal regulations.

SECTION XIV TRANSPORT INFORMATION

Proper Shipping Name: N/A
Hazard Class or Division: N/A
Identification Number: N/A
Packing Group: N/A
Packing Authorization: N/A
IATA Packing Instructions: N/A

SECTION XV REGULATORY INFORMATION

TSCA (TOXIC SUBSTANCE CONTROL ACT): Ethylene Glycol is listed.

SARA Section 302 Extremely Hazardous Substances (EHS): This product does not contain any components regulated under Section 302 (40 CFR 355) as Extremely Hazardous Substances.

SARA Section 304 CERCLA Hazardous Substances: This product does not contain any components regulated under section 304 (40 CFR 370) as hazardous chemicals for emergency release.

SARA Section 311/312 Hazard Communication Standard (HCS): This product is regulated under Section 311/312.

SARA Section 313 Toxic Chemical List (TCL): This product contains a component listed on the Section 313 Toxic Chemical List.

Clean Water Act CWA – Priority Pollutants: Not Provided

STATE REGULATIONS: California Proposition 65: Not Provided

INTERNATIONAL REGULATIONS: Not Provided

SECTION XVI OTHER INFORMATION

-THIS PRODUCT IS FOR INDUSTRIAL AND LABORATORY USE ONLY.
-Do not store in open, unlabeled or mislabeled containers.
-Store in cool, dry place with adequate ventilation.
-Keep away from flames and high temperatures.
-For personal hygiene protection, we recommend that employees wash thoroughly after handling product. Always wash up before eating, smoking, and using toilet facilities.
-Keep out of reach of children.

-HMIS rating HEALTH - 2 FLAMMABILITY - 0 REACTIVITY - 1
DISCLAIMER OF LIABILITY

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of the results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. User of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO THE INFORMATION CONTAINED HEREIN OR THE CHEMICAL TO WHICH THE INFORMATION REFERS. It is the responsibility of the user to comply with all applicable federal, state, local laws and regulations.