Section 1: Chemical Product and Company Identification
Cat#: 04018
Part Name: FORMALDEHYDE METHANOL FREE 10% ULTRAPURE E.M. GRADE
Supplier: Polysciences, Inc.
400 Valley Road
Warrington, PA 18976 USA
MSDS Telephone #215-343-6484 Emergency only #215-378-4526

Section 2: Hazards Identification

Identified uses: Laboratory use, manufacture of substances

Hazard Overview
Cancer hazard.
Causes eye irritation.
Causes skin irritation.
Harmful if absorbed through skin.
Harmful if inhaled.
Harmful if swallowed.
May cause allergic skin reaction.

GHS Classification

Acute Toxicity Inhalation Category 5
Acute Toxicity Oral Category 4
Carcinogen Category 1B
Eye Irritation Category 2A
Skin Irritant Category 2
Skin Sensitizer Category 1B

Signal word: Warning

Hazard and Precautionary Statements
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H350 May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
P285 In case of inadequate ventilation wear respiratory protection.
P301A IF SWALLOWED do not induce vomiting. Do not give anything to drink. Obtain medical attention without delay.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304A IF INHALED: Begin rescue breathing if necessary and contact medical personnel.
P315 Get immediate medical advice/attention.
P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P351 Rinse cautiously with water for several minutes.

NFPA Rating
**Section 3: Composition/ Information on Ingredients**

<table>
<thead>
<tr>
<th>Item#</th>
<th>Name</th>
<th>CAS#</th>
<th>% in product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Formaldehyde</td>
<td>200-001-8</td>
<td>0000050000</td>
</tr>
<tr>
<td>2</td>
<td>Water</td>
<td>231-791-2</td>
<td>000732185</td>
</tr>
</tbody>
</table>

**Section 4: First Aid Measures**

Begin rescue breathing if necessary and contact medical personnel.

Contact medical personnel immediately.

Flush eyes with flowing water for at least 15 minutes.

If breathing is difficult, contact emergency personnel.

If swallowed, wash out mouth with water if person is conscious.

Remove to fresh air.

Wash skin with deluge of water for at least 15 minutes.

**Section 5: Fire Fighting Measures**

Flash point, deg F.: >60C

Method: no data

UEL: 73%  LEL: 7%

Autoignition temperature, deg F.: no data

Flammability Classification: no data

Flame Propagation Rate: no data

Hazardous Combustion Products: no data

**Section 6: Accidental Release Measures**

Any information listed below is to be considered in addition to internal guidelines for isolation of spill, containment of spill, removal of ignition sources from immediate area, and collection for disposal of spill by trained, properly protected clean up personnel.

Absorb liquids on absorbent material.

Contain spilled liquids.

Protect personnel from exposure.

Use appropriate personal protective equipment.

**Section 7: Handling and Storage**

Store at room temp

**Section 8: Exposure Controls/ Personal Protection**

**OSHA (ACGIH) Exposure Limits**

<table>
<thead>
<tr>
<th>CAS#</th>
<th>IDLH:</th>
<th>TWA ppm</th>
<th>STEL ppm</th>
<th>CEILING ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000050000</td>
<td>20</td>
<td>[not available]</td>
<td>2/15 mi NE</td>
<td>-- --</td>
</tr>
<tr>
<td>000732185</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE NE</td>
</tr>
</tbody>
</table>

The use of eye protection in the form of safety glasses with side shields and the use of skin protection for hands in the form of gloves are considered minimum and non-discretionary in work places and laboratories. Any recommended personal protection equipment or environmental equipment is to be considered as additional to safety glasses and gloves.

Use process enclosures, local exhaust ventilation, or other engineering controls.

Chemical-resistant gloves should be worn whenever this material is handled. The glove material has to be impermeable and resistant to the product. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.

Rinse and remove gloves immediately after use. Wash hands with soap and water. All glove recommendations presume that the risk of exposure is through splash and not intentional immersion of the hands into the product.

Since glove permeation data does not exist for this material, no recommendation for the glove material can be given for the product.

Permeation data must be obtained from the glove manufacturer to determine if the glove is suitable for the task.

**Section 9: Physical and Chemical Properties**
Section 10: Stability and Reactivity

Chemical Stability: Stable

Conditions to Avoid: Cool or extreme temperatures

Incompatibility with other materials: Free radical sources, phenol, strong acids, alkalis

Hazardous Decomposition Products: None known

Hazardous Polymerization: Will not occur

Section 11: Toxicological Information

Acute Data: LD50 oral (rat) - 100 mg/kg; LC50 inhalation (rabbit) - 270 uL/kg; Irritation data: eye (rabbit) 750 ug; severe; Investigated as a tumorigen, mutagen and reproductive effector

Subchronic data: No data

Section 12: Ecological Information

LC50 - 96h - fish - 10-100 mg/l

Section 13: Disposal Considerations

The following chart lists the status of the chemical and its components in reference to 40 CFR Part 261.33. If the product is listed by code number the substance may be subject to special federal and state disposal regulations. If no codes are listed the material must be disposed in compliance with all Federal, State and Local Regulations.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Waste Code</th>
<th>Regulated Name</th>
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<tbody>
<tr>
<td>0000050000</td>
<td>U122</td>
<td>Formaldehyde</td>
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<tr>
<td>0007732185</td>
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</tr>
</tbody>
</table>

Section 14: Transportation Data

Proper Shipping Name: Aviation Regulated Liquid, n.o.s.
Chemical Name: Formaldehyde
UN: UN3334
Class: 9
PG: III

Section 15: Regulatory Information

All components of this product are on the TSCA public inventory.

All components of this product are on the TSCA public inventory.

Prop 65 - Column A identifies those items which are known to the State of California to cause cancer. Column B identifies items which are known to the State of California to cause reproductive toxicity.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000050000</td>
<td>Yes</td>
<td>no</td>
</tr>
<tr>
<td>0007732185</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

State Regulatory Information: If a CAS# is listed below this material is subject to the listed state right-to-know requirements.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Inspected</th>
<th>TPQ (pounds)</th>
<th>EHS-RQ (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000050000</td>
<td>500</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
CERCLA
The hazardous substances, and their reportable quantities (RQs) are listed in the federal regulations at 40 CFR Part 302, Table 302.4. Release of a CERCLA hazardous substance in an amount equal to or greater than its RQ, in any 24-hour period, must be reported to the National Response Center at (800) 424-8802.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Regulated name</th>
<th>RQ (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0007732185</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>0000050000</td>
<td>Formaldehyde</td>
<td>100</td>
</tr>
</tbody>
</table>

Section 16: Other Information

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END OF MSDS