Material Safety Data Sheet

Section 1: Chemical Product and Company Identification
Cat#: 00016
Part Name: ACROLEIN DISTILLED EM GRADE MW 56.1 bp 52
Supplier: Polysciences, Inc.
400 Valley Road
Warrington, PA 18976 USA
MSDS Telephone #215-343-6484 Emergency only #215-378-4526

Section 2: Hazards Identification
Hazard Overview
Causes skin and eye burns.
Extremely flammable liquid and vapor.
May be fatal if absorbed through skin.
May be fatal if swallowed.
May cause severe allergic respiratory reaction.

GHS Classification
Acute Toxicity Oral Category 1
Flammable Liquids Category 2
Serious Eye Damage Cat 1C, Skin Corrosion Cat 1C, Eye Irritation Cat 2B
Skin Corrosion Category 1A
Skin Sensitizer Category 1B

Signal word: Danger

Hazard and Precautionary Statements
H224 Extremely flammable liquid and vapour.
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P280A Wear protective gloves
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.
P304A IF INHALED: Begin rescue breathing if necessary and contact medical personnel.
P305B IF IN EYES: Separate eyelids with finger tips.
P315 Get immediate medical advice/attention.
P335 Brush off loose particles from skin.
P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P351 Rinse cautiously with water for several minutes.
P361 Remove/Take off immediately all contaminated clothing.

NFPA Rating

Hazard Ratings:
These ratings are Polysciences’ Inc. own assessments of the properties of the material using the ANSI/NFPA 704 Standard. Additional information can be found by consulting in the NFPA published ratings lists (List 325 and List 49).

If no data is listed the information is not available.

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

Begin rescue breathing if necessary and contact medical personnel.

Brush off the skin.

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 contaminated clothing.

Remove to fresh air.

Separate eyelids with finger tips.

Section 5: Fire Fighting Measures

Flash point, deg F.: -15

Method: CC

UEL: 31%  LEL: 2.8%

Autoignition temperature, deg. F.: no data

Flammability Classification: IB

Flame Propagation Rate: no data

Hazardous Combustion Products: oxides of carbon

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.

Remove ignition sources.

Ventilate the area.

Section 7: Handling and Storage

Keep away from light.

Keep under a nitrogen blanket.

Section 8: Exposure Controls/ Personal Protection

OSHA (ACGIH) Exposure Limits

<table>
<thead>
<tr>
<th>CAS#</th>
<th>IDLH</th>
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<tbody>
<tr>
<td>0000107028</td>
<td>2</td>
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</table>

TWA

<table>
<thead>
<tr>
<th>ppm</th>
<th>mg/</th>
<th>STEL</th>
<th>mg/m3</th>
<th>CEILING</th>
<th>mg/m3</th>
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</thead>
<tbody>
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<td></td>
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</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 chemical splash goggles and face shield.

Use latex or equivalent 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

<table>
<thead>
<tr>
<th>Formula</th>
<th>vapor pressure</th>
<th>@20°C</th>
<th>Formula Weight</th>
<th>boiling point</th>
<th>Specific gravity</th>
<th>ph</th>
<th>solubility</th>
<th>appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH2CHCHO</td>
<td>209,385 mmHg</td>
<td></td>
<td>56.06</td>
<td>127</td>
<td>0.84</td>
<td>6.0</td>
<td>insoluble</td>
<td>colorless to yellow liquid irritating</td>
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</tbody>
</table>

### Section 10: Stability and Reactivity

**Chemical Stability**: unstable

**Conditions to Avoid**: exposure to light, heat and air

**Incompatibility with other materials**: oxidizing agents, oxygen, bases, strong acids

**Hazardous Decomposition Products**: no data

**Hazardous Polymerization**: may occur

### Section 11: Toxicological Information

**Acute Data**: LD50 oral (rat): 26 mg/kg

LC50 ihl (rat): 18 mg/m3/4H

LD50 Skin (rabbit): 200 mg/kg

**Subchronic data**: target organs liver, cardiovascular system, lungs, eyes, kidneys

### Section 12: Ecological Information

no data

### 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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</thead>
<tbody>
<tr>
<td>0000107028</td>
<td>P003</td>
<td>Acrolein</td>
</tr>
</tbody>
</table>

### Section 14: Transportation Data

**Proper Shipping Name**: ACROLEIN, STABILIZED

**Chemical Name**: UN 1092

**Class**: 6.1

**PG**: I

### 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 identified items which are known to the State of California to cause reproductive toxicity.
Section 16: Other Information

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END OF MSDS