Material Safety Data Sheet
Heptaldehyde

ACC# 88016

Section 1 - Chemical Product and Company Identification

MSDS Name: Heptaldehyde
Catalog Numbers: AC422960000, AC422961000, AC422965000
Synonyms: Heptanal
Company Identification:
   Acros Organics N.V.
   One Reagent Lane
   Fair Lawn, NJ 07410
For information in North America, call: 800-ACROS-01
For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-71-7</td>
<td>Heptaldehyde</td>
<td>96</td>
<td>203-898-4</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Not available.
Target Organs: None.

Potential Health Effects The toxicological properties of this material have not been investigated. Use appropriate procedures to prevent opportunities for direct contact with the skin or eyes and to prevent inhalation.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If
not breathing, give artificial respiration. If breathing is difficult, give oxygen.  
**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - 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. Flammable liquid and vapor.  
**Extinguishing Media:** Use agent most appropriate to extinguish fire.  
**Flash Point:** Not available.  
**Autoignition Temperature:** Not available.  
**Explosion Limits, Lower:** Not available.  
**Upper:** Not available.  
**NFPA Rating:** (estimated) Health: 1; Flammability: 2; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.  
**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.

## Section 7 - Handling and Storage

**Handling:** Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame.  
**Storage:** Keep away from heat, sparks, and flame.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.  
**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptaldehyde</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Heptaldehyde: No OSHA Vacated PELs are listed for this chemical.  
**Personal Protective Equipment**

**Eyes:** Wear chemical splash goggles. Wear safety glasses and chemical goggles if splashing is possible.  
**Skin:** Wear appropriate protective gloves and clothing to prevent skin exposure. Wear appropriate protective gloves to prevent skin exposure.  
**Clothing:** Wear appropriate protective clothing to minimize contact with skin.  
**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2
requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

**Section 9 - Physical and Chemical Properties**

**Physical State:** Not available.
**Appearance:** Not available.
**Odor:** None reported.
**pH:** Not available.
**Vapor Pressure:** 3 hPa @ 20 C
**Vapor Density:** Not available.
**Evaporation Rate:** Not available.
**Viscosity:** Not available.
**Boiling Point:** 41 deg C @ 10.00mm Hg
**Freezing/Melting Point:** 0 deg C
**Decomposition Temperature:** Not available.
**Solubility:** Not available.
**Specific Gravity/Density:** .8500g/cm3
**Molecular Formula:** CH3(CH2)5CHO
**Molecular Weight:** 114.19

**Section 10 - Stability and Reactivity**

**Chemical Stability:** Stable under normal temperatures and pressures.
**Conditions to Avoid:** Incompatible materials.
**Incompatibilities with Other Materials:** Oxidizing agents, strong reducing agents, strong bases.
**Hazardous Decomposition Products:** Carbon monoxide, carbon monoxide, carbon dioxide.
**Hazardous Polymerization:** Has not been reported.

**Section 11 - Toxicological Information**

**RTECS#:**
**CAS# 111-71-7: MI6900000**

**LD50/LC50:**
**CAS# 111-71-7:**
- Draize test, rabbit, eye: 100 uL Severe;
- Inhalation, rat: LC50 = >18400 mg/m3/4H;
- Oral, mouse: LD50 = 3200 mg/kg;
- Oral, rat: LD50 = 3200 mg/kg;
- Oral, rat: LD50 = 5000 mg/kg;
- Skin, rabbit: LD50 = >5 gm/kg;

**Carcinogenicity:**
CAS# 111-71-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** No information available.

**Neurotoxicity:** No information available.

**Other Studies:**

### Section 12 - Ecological Information

No information available.

### Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

### Section 14 - Transport Information

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
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<tbody>
<tr>
<td><strong>Shipping Name:</strong></td>
<td>Not regulated as a hazardous material</td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Hazard Class:</strong></td>
<td></td>
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<tr>
<td><strong>UN Number:</strong></td>
<td></td>
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<tr>
<td><strong>Packing Group:</strong></td>
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</table>

### Section 15 - Regulatory Information

**US FEDERAL**

**TSCA**

CAS# 111-71-7 is listed on the TSCA inventory.

**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**
None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**
None of the chemicals in this product have a TPQ.

**SARA Codes**
- CAS # 111-71-7: immediate, fire.

**Section 313**
No chemicals are reportable under Section 313.

**Clean Air Act:**
- This material does not contain any hazardous air pollutants.
- This material does not contain any Class 1 Ozone depletors.
- This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**
- None of the chemicals in this product are listed as Hazardous Substances under the CWA.
- None of the chemicals in this product are listed as Priority Pollutants under the CWA.
- None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**
None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**
- CAS# 111-71-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**
California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**
- XI

**Risk Phrases:**
- R 10 Flammable.
- R 36/37/38 Irritating to eyes, respiratory system and skin.

**Safety Phrases:**
- S 16 Keep away from sources of ignition - No smoking.
- S 24/25 Avoid contact with skin and eyes.
- S 36 Wear suitable protective clothing.

**WGK (Water Danger/Protection)**
- CAS# 111-71-7: No information available.

**Canada - DSL/NDSL**
- CAS# 111-71-7 is listed on Canada's DSL List.

**Canada - WHMIS**
- WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

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**Section 16 - Additional Information**

**MSDS Creation Date:** 1/07/1999
**Revision #4 Date:** 3/25/2008

The information above is believed to be accurate and represents the best information currently available to us. However, we make no
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