Material Safety Data Sheet
Palmitic acid

ACC# 66262

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Palmitic acid  
**Catalog Numbers:** AC129700000, AC129700010, AC416690000, AC416691000, AC416695000  
**Synonyms:** Hexadecanoic acid.  
**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>57-10-3</td>
<td>Palmitic acid</td>
<td>90+</td>
<td>200-312-9</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: almost white flakes.  
**Warning!** Causes eye and skin irritation.  
**Target Organs:** Eyes, skin.

**Potential Health Effects**

**Eye:** Causes eye irritation.  
**Skin:** Causes skin irritation. May be harmful if absorbed through the skin.  
**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.  
**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled.  
**Chronic:** No information found.

Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.  
**Skin:** Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Do not induce vomiting. Get medical aid if irritation or symptoms occur.
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
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.
Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.
Flash Point: 206 deg C (402.80 deg F)
Autoignition Temperature: Not applicable.
Explosion Limits, Lower: Not available.
Upper: Not available.
NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 1

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.
Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

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

OSHA Vacated PELs: Palmitic acid: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
**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.

### Section 9 - Physical and Chemical Properties

**Physical State:** Flakes  
**Appearance:** white - almost white  
**Odor:** Not available.  
**pH:** Not applicable.  
**Vapor Pressure:** Negligible  
**Vapor Density:** Not available.  
**Evaporation Rate:** Negligible  
**Viscosity:** 7.8mPas @ 70C  
**Boiling Point:** 351.5 deg C @ 760 mmHg  
**Freezing/Melting Point:** 59 - 63 deg C  
**Decomposition Temperature:** Not available.  
**Solubility:** Insoluble.  
**Specific Gravity/Density:** 0.850  
**Molecular Formula:** C16H32O2  
**Molecular Weight:** 256.42

### Section 10 - Stability and Reactivity

**Chemical Stability:** Light sensitive.  
**Conditions to Avoid:** Incompatible materials, light, dust generation, excess heat.  
**Incompatibilities with Other Materials:** Oxidizing agents, reducing agents, bases.  
**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.  
**Hazardous Polymerization:** Has not been reported

### Section 11 - Toxicological Information

**RTECS#:**  
**CAS#** 57-10-3: RT4550000  
**LD50/LC50:**  
**CAS#** 57-10-3:  
  - Oral, rat: LD50 = >10 gm/kg;  

**Carcinogenicity:**  
**CAS#** 57-10-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.  

**Epidemiology:** No information found  
**Teratogenicity:** No information available.  
**Reproductive Effects:** No information available.
Mutagenicity: No information available.
Neurotoxicity: No information available.
Other Studies:

Section 12 - Ecological Information

Ecotoxicity: Fish: Goldfish: LD = 11 mg/L; Unspecified; Unspecified Fish: Red killifish: LC50 = 150 mg/L; 96 Hr; Unspecified Biodegradation of palmitic acid is a relatively quick process, reaching approximately 37 percent biodegradation after 5 days in the presence of both sewage inoculum and activated sludge. In water, palmitic acid is expected to adsorb to sediment or particulate matter based on its Koc value. This compound is not expected to volatilize from water surfaces given its estimated Henry's Law constant. Bioconcentration in aquatic organisms should be very high based upon an estimated BCF value of 166,000. Environmental: If released into the atmosphere, palmitic acid is expected to exist solely in the particulate phase in the ambient atmosphere. Any vapor-phase palmitic acid is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals with a half-life of about 20 hours. An estimated Koc value of 189,000 suggests that palmitic acid will be immobile in soil. Volatilization from moist soil is not expected and volatilization from dry soil surfaces should not be important. Physical: No information available.
Other: Do not empty into drains.

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>
</thead>
<tbody>
<tr>
<td>Shipping Name:</td>
<td>Not regulated.</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td></td>
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<tr>
<td>UN Number:</td>
<td></td>
<td></td>
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<tr>
<td>Packing Group:</td>
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</tbody>
</table>

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 57-10-3 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.

**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# 57-10-3 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 36/38 Irritating to eyes and skin.

**Safety Phrases:**
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 37/39 Wear suitable gloves and eye/face protection.

**WGK (Water Danger/Protection)**
CAS# 57-10-3: 0

**Canada - DSL/NDSL**
CAS# 57-10-3 is listed on Canada's DSL List.

**Canada - WHMIS**
This product has a WHMIS classification of D2B.
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: 5/27/1999
Revision #5 Date: 10/18/2007

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.