Material Safety Data Sheet  
Palmitic Acid, 98% (GC)

ACC# 97076

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Palmitic Acid, 98% (GC)  
**Catalog Numbers:** AC129700000, AC129700010  
**Synonyms:** Cetylic acid; Hexadecanoic acid; n-Hexadecanoic acid; n-Hexadecylic acid; Hexadecylic acid; 1-Pentadecanecarboxylic 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>99</td>
<td>200-312-9</td>
</tr>
</tbody>
</table>

**Hazard Symbols:** XI  
**Risk Phrases:** 36/37/38

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: white chips. Causes eye and skin irritation. **Warning!** The toxicological properties of this material have not been fully investigated. Causes respiratory tract irritation. May cause digestive tract irritation with nausea, vomiting, and diarrhea.  
**Target Organs:** None known.

**Potential Health Effects**  
**Eye:** Causes eye irritation.  
**Skin:** Causes skin irritation.  
**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.  
**Inhalation:** Causes respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.  
**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:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing.
and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

**Extinguishing Media:** Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate 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: 0

### 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. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Clean up residual material by washing area with a 2-5% solution of soda ash.

### Section 7 - Handling and Storage

**Handling:** Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Minimize dust generation and accumulation. Use spark-proof tools and explosion proof equipment. Avoid breathing dust, vapor, mist, or gas. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

### 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 general or local explosion-proof ventilation to keep airborne levels to acceptable 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>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 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 a respirator's use.

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**Section 9 - Physical and Chemical Properties**

**Physical State:** Chips

**Appearance:** White

**Odor:** Not available.

**pH:** Not available.

**Vapor Pressure:** 10 mm Hg @ 210°C

**Vapor Density:** Not available.

**Evaporation Rate:** Negligible

**Viscosity:** 7.8 mPas @ 70°C

**Boiling Point:** 351 deg C

**Freezing/Melting Point:** 63 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Insoluble.

**Specific Gravity/Density:** 0.849

**Molecular Formula:** C16H32O2

**Molecular Weight:** 256.2228

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**Section 10 - Stability and Reactivity**

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, dust generation, excess heat.

**Incompatibilities with Other Materials:** Bases, oxidizing materials, reducing materials.

**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**Hazardous Polymerization:** Will not occur.

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**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, NIOSH, NTP, or OSHA.

**Epidemiology:** Implant, mouse: TDLo = 1000 mg/kg (Tumorigenic - neoplastic by RTECS criteria - Kidney, Ureter, Bladder - tumors).

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Neurotoxicity:** No information available.
**Mutagenicity:** No information available.

**Other Studies:** Standard Draize Test: Administration onto the skin (human) = 75 mg/3D (Intermittent) (Mild).

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**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:** No information available.

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**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.

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**Section 14 - Transport Information**

| Shipping Name: | No information available. |
| Hazard Class: | |
| UN Number: | |
| Packing Group: | |

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**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.

**SARA**

**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 material 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 depleters. This material does not contain any Class 2 Ozone depleters.

**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 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 36/37/38 Irritating to eyes, respiratory system and skin.

**Safety Phrases:**

**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.

**Canadian Ingredient Disclosure List**

**Exposure Limits**

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**Section 16 - Additional Information**

**MSDS Creation Date:** 5/27/1999
**Revision #3 Date:** 3/18/2003

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, however arising, even if Fisher has been advised of the possibility of such damages.