Material Safety Data Sheet  
Cholic acid

ACC# 96535

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Cholic acid  
**Catalog Numbers:** AC159110000, AC159110250, AC159111000, AC159115000  
**Synonyms:** 3α,7α,12α-Trihydroxy-5α-cholanic 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>81-25-4</td>
<td>Cholic acid</td>
<td>97</td>
<td>201-337-8</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: white to light beige crystalline powder.  
**Caution!** May cause eye, skin, and respiratory tract irritation. The toxicological properties of this material have not been fully investigated.  
**Target Organs:** None.

**Potential Health Effects**  
**Eye:** May cause eye irritation.  
**Skin:** May cause 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:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.  
**Skin:** In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get
medical aid if irritation develops and persists. Wash clothing before reuse.

**Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

**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.

**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.

**Extinguishing Media:** In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

### Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry place. Keep container closed when not in use. 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.

**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>Cholic acid</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>
OSHA Vacated PELs: Cholic 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 and clothing to prevent skin exposure.
Clothing: Wear appropriate protective clothing to minimize contact with skin.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder
Appearance: white to light beige
Odor: None reported.
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point: 197-202 deg C
Decomposition Temperature: Not available.
Solubility: 0.28g/l (15 c)
Specific Gravity/Density: Not available.
Molecular Formula: C24H40O5
Molecular Weight: 408.57

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: Strong oxidizing agents, strong bases.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: 
CAS# 81-25-4: FZ9350000
LD50/LC50: 
CAS# 81-25-4: 
    Oral, mouse: LD50 = 4950 mg/kg;
Carcinogenicity:
CAS# 81-25-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found
Teratogenicity: No information found
Reproductive Effects: No information found
Mutagenicity: No information found
Neurotoxicity: No information found
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

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<thead>
<tr>
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<th>US DOT</th>
<th>Canada TDG</th>
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<tbody>
<tr>
<td>Shipping Name:</td>
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<td>Not Regulated</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td></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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</table>

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 81-25-4 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# 81-25-4 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:
Not available.

Risk Phrases:

Safety Phrases:
S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
CAS# 81-25-4: No information available.

Canada - DSL/NDSL
CAS# 81-25-4 is listed on Canada's DSL List.

Canada - 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

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997
Revision #6 Date: 11/20/2008

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.