Material Safety Data Sheet
Ethyl Cyanoacetate, 98+%  

MSDS# 84598

Section 1 - Chemical Product and Company Identification

MSDS Name: Ethyl Cyanoacetate, 98+%  
Catalog Numbers: AC118280000, AC118280010, AC118280050, AC118282500, AC118285000, SB00844DA, SB00844EA, SB00844EE  
Synonyms:  
Company Identification: Acros Organics BVBA  
Company Identification: Janssen Pharmaceuticaal  
Company Identification: Acros Organics BVBA  
Company Identification: (USA)  
For information in the US, call: 800-ACROS-01  
For information in Europe, call: +32 14 57 52 11  
Emergency Number, Europe: +32 14 57 52 99  
Emergency Number US: 201-796-7100  
CHEMTREC Phone Number, US: 800-424-9300  
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

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<table>
<thead>
<tr>
<th>CAS#</th>
<th>105-56-6</th>
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<tbody>
<tr>
<td>Chemical Name</td>
<td>Ethyl Cyanoacetate</td>
</tr>
<tr>
<td>%</td>
<td>98</td>
</tr>
<tr>
<td>EINECS#</td>
<td>203-309-0</td>
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</tbody>
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Hazard Symbols: XI  
Risk Phrases: 38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! Light sensitive. Moisture sensitive. Lachrymator (substance which increases the flow of tears). May cause eye and skin irritation. May cause respiratory and digestive tract irritation. Target Organs: None.

Potential Health Effects

Eye: May cause eye irritation. Lachrymator (substance which increases the flow of tears).
Skin: May cause skin irritation.
Ingestion: May cause irritation of the digestive tract.
Inhalation: May cause respiratory tract irritation.
Chronic:

Section 4 - First Aid Measures

Eyes: 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.

Ingestion:
If victim is conscious and alert, give 2-4 cupfuls of milk or water. 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:

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. Substance may react with water, and may release corrosive and/or toxic gases.

Extinguishing Media:
Use dry chemical or carbon dioxide. Contact with water or steam may produce toxic and flammable vapors.

Autoignition Temperature: 478 deg C (892.40 deg F)
Flash Point: 110 deg C (230.00 deg F)

Explosion Limits:
Lower: Not available
Upper: Not available

NFPA Rating: 1 - health, 1 - flammability, 1 - instability

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. Provide ventilation.

Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Use only in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage:
Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

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

OSHA Vacated PELs: Ethyl Cyanoacetate: None listed

Engineering Controls:
Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

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.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: 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: Liquid
Color: clear very light yellow
Odor: pleasant odor
pH: Not available
Vapor Pressure: 1 mmHg @ 68 C
Vapor Density: 3.9
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 208 - 210 deg C @ 760.00mm Hg
Freezing/Melting Point: -22 deg C (-7.60°F)
Decomposition Temperature: Not available
Solubility in water: Insoluble
Specific Gravity/Density: 1.0630g/cm3
Molecular Formula: C5H7NO2
Molecular Weight: 113.12

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, moist air.
Incompatibilities with Other Materials Strong oxidizing agents, strong reducing agents, strong acids, strong bases.
Hazardous Decomposition Products Nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 105-56-6: AG4110000
LD50/LC50: RTECS: Not available.
Carcinogenicity: Ethyl Cyanoacetate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: TOXIC LIQUIDS, ORGANIC, N.O.S.
Hazard Class: 6.1
UN Number: UN2810
Packing Group: III
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XI
Risk Phrases:
R 38 Irritating to skin.
Safety Phrases:
S 37 Wear suitable gloves.

WGK (Water Danger/Protection)
CAS# 105-56-6: 1

Canada
CAS# 105-56-6 is listed on Canada's DSL List
Canadian WHMIS Classifications: 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.
CAS# 105-56-6 is listed on Canada's Ingredient Disclosure List

US Federal
TSCA
CAS# 105-56-6 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 5/04/1998
Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility 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 the company 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 the company has been advised of the possibility of such damages.

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