Material Safety Data Sheet  
4-Nitrobenzoic acid, 99+%  

MSDS# 72409  

Section 1 - Chemical Product and Company Identification

MSDS Name: 4-Nitrobenzoic acid, 99+%  
Catalog Numbers: AC128460000, AC128460010, AC128460250, AC128461000, AC128465000  
Synonyms: 1-carboxy-4-nitrobenzene; p-nitrobenzenecarboxylic acid; p-nitrobenzoic acid; 4-nitrobenzoic acid; 4-nitrohydracyclic acid  

Company Identification: Acros Organics BVBA  
Janssen Pharmaceuticalaan 3a  
2440 Geel, Belgium  

Company Identification: (USA)  
Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410  

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  
CHEMTREC Phone Number, US: 800-424-9300  
CHEMTREC Phone Number, Europe: 703-527-3887  

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>62-23-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
<td>4-Nitrobenzoic acid</td>
</tr>
<tr>
<td>%</td>
<td>99+</td>
</tr>
<tr>
<td>EINECS#:</td>
<td>200-526-2</td>
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</tbody>
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Hazard Symbols: XN

Risk Phrases: 22

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! Moisture sensitive. May be harmful if swallowed. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. Target Organs: None.

Potential Health Effects

Eye: Dust may cause mechanical irritation.
Skin: May cause skin irritation.
Ingestion: May cause digestive tract disturbances. May be harmful if swallowed.
Inhalation: Dust is irritating to the respiratory tract.
Chronic: No information found.

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. Wash clothing before reuse. Remove 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 immediately.

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.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: Not available
Flash Point: Not available
Explosion Limits: Not available

NFPA Rating: 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 or absorb material, then place into a suitable clean, dry, closed 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. Avoid ingestion and inhalation.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

OSHA Vacated PELs: 4-Nitrobenzoic acid: 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: Crystalline powder
Color: slightly yellow
Odor: None reported.
pH: 2.80
Vapor Pressure: Not available
Vapor Density: 5.76
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: 239.00 - 241.00 deg C
Decomposition Temperature:
Solubility in water: insoluble
Specific Gravity/Density:
Molecular Formula: C7H5NO4
Molecular Weight: 167.12

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, dust generation, moisture, strong oxidants.
Incompatibilities with Other Materials Strong oxidizing agents, acids, strong bases, potassium hydroxide.
Hazardous Decomposition Products Nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen gas.
Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 62-23-7: DH5075000
LD50/LC50: CAS# 62-23-7: Draize test, rabbit, eye: 20 mg/24H Moderate;
Oral, rat: LD50 = 1960 mg/kg;
Carcinogenicity: 4-Nitrobenzoic acid - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information.

Not available

Section 12 - Ecological Information

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

Section 13 - Disposal Considerations

US DOT
Shipping Name: Not regulated as a hazardous material
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

Section 14 - Transport Information

European/International Regulations

European Labeling in Accordance with EC Directives
Hazard Symbols: XN
Risk Phrases:
   R 22 Harmful if swallowed.
Safety Phrases:
   S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
   CAS# 62-23-7: Not available

Canada
   CAS# 62-23-7 is listed on Canada's DSL List
   Canadian WHMIS Classifications: 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.
   CAS# 62-23-7 is listed on Canada's Ingredient Disclosure List

US Federal
TSCA
   CAS# 62-23-7 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 9/11/1998
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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