Material Safety Data Sheet
4-Cyanophenol, 99\%

MSDS\# 00015
Section 1 - Chemical Product and Company Identification

| MSDS Name: 4 -Cyanophenol, 99\% |  |
| :---: | :---: |
| Catalog Numbers: AC110830 | AC110830000, AC110830050, AC110830250, AC110831000 |
| Synonyms: 4-Hydroxy |  |
| Company Identification: | Acros Organics BVBA Janssen Pharmaceuticalaan 3a 2440 Geel, Belgium |
| Company Identification: (USA) | Acros Organics <br> One Reagent Lane <br> Fair Lawn, NJ 07410 |
| For information in the US, call: | 800-ACROS-01 |
| For information in Europe, call: | +3214575211 |
| Emergency Number, Europe: | +3214575299 |
| 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

CAS\#:
Chemical Name:
\%:
EINECS\#:

767-00-0
4-Cyanophenol
99
212-175-2

Hazard Symbols: XN


Risk Phrases:

22 36/37/38
Section 3 - Hazards Identification
EMERGENCY OVERVIEW

Warning! May cause central nervous system depression. May cause cardiac disturbances. Metabolized to cyanide in the body, which may cause headache, dizziness, weakness, unconsciousness, convulsions, coma and possible death. Causes eye, skin, and respiratory tract irritation. Target Organs: Central nervous system, cardiovascular system.
Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration.
May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause cardiac disturbances. May
Ingestion: cause central nervous system depression. Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness and possible death.
Causes respiratory tract irritation. May cause cardiac abnormalities. May be metabolized to cyanide which in Inhalation: turns act by inhibiting cytochrome oxidase impairing cellular respiration. Inhalation at high concentrations may
cause CNS depression and asphixiation.
May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration.
Chronic: Chronic exposure to cyanide solutions may lead to the development of a "cyanide" rash, characterized by itching, and by macular, papular, and vesicular eruptions, and may be accompanied by secondary infections.

## Section 4 - First Aid Measures

Eyes:
Skin:

Ingestion:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Inhalation:
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.
Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.
Notes to Physician:

Antidote:
May be partially metabolized to cyanide in the body.
Always have a cyanide antidote kit on hand when working with cyanide compounds. Get medical advice to use.

## Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved

General Information:

Extinguishing Use water spray to cool fire-exposed containers. For small fires, use dry chemical, carbon dioxide, or Media: or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Containers may explode when heated. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes. Runoff from fire control or dilution water may cause pollution.
${ }_{\text {Temperature: }}^{\text {Autoignition }}$ Not applicable.
Flash Point: Not applicable.
Explosion
Limits: Lower: Not available
Explosion
Limits: Upper:
NFPA Rating: health: 2 ; flammability: 0 ; instability: 0 ;

## Section 6 - Accidental Release Measures

General
Information:
Use proper personal protective equipment as indicated in Section 8.
Vack or sweep up matria and place into a sutable disposal container. Clean up spils immediaty, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

Handling: Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.
Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: 4-Cyanophenol: None listed
Engineering Controls:
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: Physical State:
Color: off-white to cream
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: 110.00-113.00 deg C
Decomposition Temperature: Not available
Solubility in water: slightly soluble Specific Gravity/Density:

Molecular Formula: C7H5NO
Molecular Weight: 119.12
Section 10 - Stability and Reactivity
Chemical Stability:
Conditions to Avoid:
Incompatibilities with Other Materials

Hazardous Decomposition
Products
Hazardous Polymerization
Stable at room temperature in closed containers under normal storage and handling conditions.
Incompatible materials, dust generation, excess heat, strong oxidants.
Oxidizing agents.

Nitrogen oxides, carbon monoxide, carbon monoxide, carbon dioxide, nitrogen gas. Has not been reported.

Section 11 - Toxicological Information
RTECS\#: CAS\# 767-00-0: DI4375000 RTECS:
LD50/LC50: $\quad$ CAS\# 767-00-0: Oral, mouse: LD50 $=450 \mathrm{mg} / \mathrm{kg}$;

Carcinogenicity: 4-Cyanophenol - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: The hazards associated with cyanide may be seen in this product.

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 SOLIDS, ORGANIC, N.O.S.
Hazard Class: 6.1

UN Number: UN2811
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: XN
Risk Phrases:
R 22 Harmful if swallowed.
R 36/37/38 Irritating to eyes, respiratory system and skin.
Safety Phrases:
S 24/25 Avoid contact with skin and eyes.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)
CAS\# 767-00-0: Not available

## Canada

CAS\# 767-00-0 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\# 767-00-0 is not listed on Canada's Ingredient Disclosure List.

## US Federal

TSCA
CAS\# 767-00-0 is listed on the TSCA
Inventory.
Section 16 - Other Information
MSDS Creation Date: 9/02/1997
Revision \#8 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.

