

## \*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

4-Chlorophenol, pract., 95%

## \*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: 4-Chlorophenol, pract., 95%

Catalog Numbers:

40493-0000, 40493-0030, 40493-0050, 40493-5000

Synonyms:

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

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

For information in North America, call: 800-ACROS-01

For information in Europe, call: 0032(0) 14575211

For emergencies in the US, call CHEMTREC: 800-424-9300

For emergencies in Europe, call: 0032(0) 14575299

## \*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\*

CAS#	Chemical Name	%	EINECS#	Haz Symbols	Risk Phrases
106-48-9	4-Chlorophenol	95%	203-402-6		

Hazard Symbols: XN N

Risk Phrases: 20/21/22

## \*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

## EMERGENCY OVERVIEW

Harmful by inhalation, in contact with skin and if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## Potential Health Effects

## Eye:

Causes eye irritation. Causes redness and pain.

## Skin:

Causes skin irritation. Harmful if absorbed through the skin. If absorbed, causes symptoms similar to those of ingestion. Causes redness and pain. May cause blistering of the skin.

## Ingestion:

Harmful if swallowed. May cause irritation of the digestive tract. May cause respiratory failure. May cause circulatory system failure. May cause cardiac disturbances. May cause severe digestive tract irritation with abdominal pain, nausea, vomiting and diarrhea. Methemoglobinemia is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), rapid heart rate and chocolate-brown colored blood. May cause serious burns of the mouth and esophagus. May cause disorientation, sweating and weakness.

## Inhalation:

Harmful if inhaled. May cause respiratory tract irritation. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.

## Chronic:

May cause liver and kidney damage.

## \*\*\*\* 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.

**Skin:**

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:**

Get medical aid. Wash mouth out with 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.

**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.

**Extinguishing Media:**

Use water spray, dry chemical, carbon dioxide, or chemical foam.

\*\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*\*

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

**Spills/Leaks:**

Do not flush into a sewer. Cover with sand and place into a closed container for disposal.

\*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\*

**Handling:**

Avoid breathing dust, vapor, mist, or gas. Avoid contact with eyes, skin, and clothing.

**Storage:**

Store in a cool, dry place. 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.

**Personal Protective Equipment****Eyes:**

Wear chemical goggles.

**Skin:**

Wear appropriate protective gloves to prevent skin exposure.

**Clothing:**

Wear appropriate protective clothing to prevent skin exposure.

**Respirators:**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

\*\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\*

**Physical State:** Solid  
**Color:** white to yellow  
**Odor:** phenol-like - characteristic odor

pH: Not available.  
Vapor Pressure: 0.13 mbar @ 20 deg C  
Viscosity: 4.99 cP @ 50 deg C  
Boiling Point: 220 deg C @ 760 mmHg  
Freezing/Melting Point: 40 - 45 deg C  
Autoignition Temperature: Not available.  
Flash Point: 121 deg C ( 249.80 deg F)  
Explosion Limits, lower: Not available.  
Explosion Limits, upper: Not available.  
Decomposition Temperature: > 300 deg C  
Solubility in water: 2.7 g/100ml in water (20•C)  
Specific Gravity/Density: 1.3060 g/cm3  
Molecular Formula: C6H5ClO  
Molecular Weight: 128.56

\*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\*

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources, heat.

Incompatibilities with Other Materials:

Oxidizing agents, acid chlorides, aluminum, copper, acid anhydrides, steam.

Hazardous Decomposition Products:

Hydrogen chloride, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

\*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

RTECS#:

CAS# 106-48-9: SK2800000

LD50/LC50:

CAS# 106-48-9: Draize test, rabbit, eye: 250 ug/24H Severe; Draize test, rabbit, skin: 2 mg/24H Severe; Inhalation, rat: LC50 = 11 mg/m3; Oral, mouse: LD50 = 367 mg/kg; Oral, mouse: LD50 = 1373 mg/kg; Oral, mouse: LD50 = 605 mg/kg; Oral, rat: LD50 = 670 mg/kg; Oral, rat: LD50 = 261 mg/kg; Skin, rat: LD50 = 1500 mg/kg; Skin, rat: LD50 = 1000 mg/kg.

Not available.

Carcinogenicity:

4-Chlorophenol -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

\*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

Ecotoxicity:

Daphnia: Daphnia: EC50 = 7.7 mg/l; 48 H; .Fish: Rainbow trout: LC50 = 1.9 mg/l; 96 H; flow-through bioassayFish: Fathead Minnow: LC50 = 3.8 - 5 mg/l; 96 H; static bioassayFish: Sheepshead minnow: LC50 = 5.4 - 3.2 mg/l; 96 H; static bioassayFish: Bluegill/Sunfish: LC50 = 3830 •g/l; 96 H; .Fish: Goldfish: LC50 = 9000 •g/l; 24 H; .Daphnia: Daphnia: EC50 = 7.7 mg/l; 48 H; .Fish: Rainbow trout: LC50 = 1.9 mg/l; 96 H; flow-through bioassayFish: Fathead Minnow: LC50 = 3.8 - 5 mg/l; 96 H; static bioassayFish: Sheepshead minnow: LC50 = 5.4 - 3.2 mg/l; 96 H; static bioassayFish: Bluegill/Sunfish: LC50 = 3830 •g/l; 96 H; .Fish: Goldfish: LC50 = 9000 •g/l; 24 H; .log POW = 2.41

Other

Avoid entering into waters or underground water. Do not empty into drains.

\*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\*

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

## \*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

## IATA

Shipping Name: CHLOROPHENOLS, SOLID  
Hazard Class: 6.1  
UN Number: 2020  
Packing Group: III

## IMO

Shipping Name: CHLOROPHENOLS, SOLID  
Hazard Class: 6.1  
UN Number: 2020  
Packing Group: III

## RID/ADR

Shipping Name: CHLOROPHENOLS, SOLID  
Hazard Class: 6.1  
UN Number: 2020  
Packing group: III

## \*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

## European/International Regulations

## European Labeling in Accordance with EC Directives

Hazard Symbols: XN N  
Risk Phrases:

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.  
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## Safety Phrases:

S 28A After contact with skin, wash immediately with plenty of water.  
S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

## WGK (Water Danger/Protection)

CAS# 106-48-9: 2

## United Kingdom Occupational Exposure Limits

## United Kingdom Maximum Exposure Limits

## Canada

CAS# 106-48-9 is listed on Canada's DSL List.  
CAS# 106-48-9 is listed on Canada's Ingredient Disclosure List.

## Exposure Limits

CAS# 106-48-9: OEL-POLAND:TWA 1 mg/m3  
OEL-RUSSIA:STEL 1 mg/m3;Skin

## US FEDERAL

## TSCA

CAS# 106-48-9 is listed on the TSCA inventory.

## \*\*\*\* SECTION 16 - ADDITIONAL INFORMATION \*\*\*\*

MSDS Creation Date: 7/16/1996 Revision #2 Date: 10/01/2002

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 way 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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