

# Material Safety Data Sheet

## 2,4,6-Trichlorophenol, 98%

ACC# 83212

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** 2,4,6-Trichlorophenol, 98%

**Catalog Numbers:** AC139480000, AC139480010, AC139481000

**Synonyms:** 1-Hydroxy-2,4,6-Trichlorobenzene.

**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

CAS#	Chemical Name	Percent	EINECS/ELINCS
88-06-2	2,4,6-Trichlorophenol	98	201-795-9

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: light beige crystalline chunks.

**Caution!** Causes severe eye irritation. Causes skin irritation and possible burns. May be harmful if swallowed or absorbed through the skin. Potential cancer hazard. May cause cancer based on animal studies. This substance has caused adverse reproductive and fetal effects in animals. This product contains 2,4,6-Trichlorophenol, a substance known to the state of California to cause cancer.

**Target Organs:** Blood, liver, nerves.

#### Potential Health Effects

**Eye:** Causes severe eye irritation. May cause chemical conjunctivitis and corneal damage.

**Skin:** May be harmful if absorbed through the skin. Causes skin irritation and possible burns. Substance is readily absorbed through the skin. Contact with skin produces redness and edema.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.

**Inhalation:** Dust is irritating to the respiratory tract. Causes irritation of mucous membrane.

**Chronic:** Effects may be delayed. Workers exposed to chlorophenols showed persistent chloracne, liver dysfunction, neuromuscular weakness, porphyria and psychological changes.

### Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed.

**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Runoff from fire control or dilution water may cause pollution.

**Extinguishing Media:** Use carbon dioxide, dry chemical powder or water spray.

**Flash Point:** 99 deg C ( 210.20 deg F)

**Autoignition Temperature:** Not applicable.

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

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 1; 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. Cover with an activated carbon adsorbent and place into a closed container for disposal. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood. Do not breathe dust.

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

## 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

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2,4,6-Trichlorophenol	none listed	none listed	none listed

**OSHA Vacated PELs:** 2,4,6-Trichlorophenol: 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 to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline chunks

**Appearance:** light beige

**Odor:** None reported.

**pH:** Moderately acidic

**Vapor Pressure:** 1 hPa @ 77 deg C

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 246 deg C @ 760 mm Hg

**Freezing/Melting Point:** 64 - 66 deg C

**Decomposition Temperature:** Not available.

**Solubility:** 800 mg/L @ 25°C

**Specific Gravity/Density:** 1.409

**Molecular Formula:** C<sub>6</sub>H<sub>3</sub>Cl<sub>3</sub>O

**Molecular Weight:** 197.45

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Dust generation, excess heat.

**Incompatibilities with Other Materials:** Strong oxidizing agents, acid chlorides, acid anhydrides.

**Hazardous Decomposition Products:** Hydrogen chloride, carbon monoxide, carbon dioxide, chloride fumes.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

### RTECS#:

CAS# 88-06-2: SN1575000

### LD50/LC50:

CAS# 88-06-2:

Draize test, rabbit, eye: 250 ug/24H Severe;

Draize test, rabbit, skin: 20 mg/24H Moderate;

Oral, mouse: LD50 = 770 mg/kg;

Oral, rat: LD50 = 820 mg/kg;

### Carcinogenicity:

CAS# 88-06-2:

- **ACGIH:** Not listed.
- **California:** carcinogen, initial date 1/1/88
- **NTP:** Suspect carcinogen
- **IARC:** Not listed.

**Epidemiology:** No data available.

**Teratogenicity:** Oral, rat: TDLo = 12500 mg/kg (female, 2 wk pre-mating & 1-21 days after conception--effects on newborn growth statistics).

**Reproductive Effects:** No information found

**Mutagenicity:** Mutation in Microorganisms: Salmonella typhimurium = 10 ug/plate. Mutagenic effects have occurred in experimental animals.

**Neurotoxicity:** No information found

**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** Fish: Bluegill/Sunfish: LC50 = 0.72 mg/L; 24 hours; not specified Fish: Bluegill/Sunfish: LC50 = 0.32 mg/L; 96 hours; not specified Fish: Fathead Minnow: LC50 = 9.16 mg/L; 96 hours; flow through bioassay with measured concentrations Fish: Fathead Minnow: LC50 = 4.55 mg/L; 96 hours; flow through bioassay with measured concentrations Fish: Fathead Minnow: EC50 = 4.27 mg/L; 96 hours; flow through bioassay with measured concentrations Fish: Fathead Minnow: LC50 = 2.80 mg/L; 96 hours; flow through bioassay with measured concentrations No data available.

**Environmental:** May biodegrade in soil depending on cond., mod. to extensive adsorption to soil, leaching to groundwater not expected, but leaching through soil can be significant. May significantly volatilize & photomineralize on soil surface, but not hydrolyze. May appreciably biodegrade in water, will not hydrolyze, but subject to appreciably adsorb to sediments. Bioaccumulation in aq. organisms not expected, but significant bioaccumulation has been reported in some species. Photodegradation and volatilization from water surface is expected. Photodegrades in air, deposition in snow and rainout significant.

**Physical:** Half-life in soil as little as 3 days. Average half-life in river water: 6.3 days. Estimated half-life by reaction in air with photochemically produced hydroxyl radicals: 2.7 days. Half-life due to photodegradation in air: <17 hours.

**Other:** 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

	US DOT	Canada TDG
<b>Shipping Name:</b>	CHLOROPHENOLS, SOLID	CHLOROPHENOLS, SOLID
<b>Hazard Class:</b>	6.1	6.1
<b>UN Number:</b>	UN2020	UN2020
<b>Packing Group:</b>	III	III

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 88-06-2 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

CAS# 88-06-2: 10 lb final RQ; 4.54 kg final RQ

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### Section 313

This material contains 2,4,6-Trichlorophenol (CAS# 88-06-2, 98%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR

#### Clean Air Act:

CAS# 88-06-2 is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

CAS# 88-06-2 is listed as a Hazardous Substance under the CWA. CAS# 88-06-2 is listed as a Priority Pollutant under the Clean Water Act. CAS# 88-06-2 is listed as a Toxic Pollutant under the Clean Water Act.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 88-06-2 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

#### California Prop 65

The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:

WARNING: This product contains 2,4,6-Trichlorophenol, a chemical known to the state of California to cause cancer.  
California No Significant Risk Level: CAS# 88-06-2: 10 µg/day NSRL

**European/International Regulations**  
**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**

XN

**Risk Phrases:**

R 22 Harmful if swallowed.  
R 36/38 Irritating to eyes and skin.  
R 40 Limited evidence of a carcinogenic effect.

**Safety Phrases:**

S 36/37 Wear suitable protective clothing and gloves.

**WGK (Water Danger/Protection)**

CAS# 88-06-2: No information available.

**Canada - DSL/NDSL**

CAS# 88-06-2 is listed on Canada's NDSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D1B, D2A.

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**

CAS# 88-06-2 is not listed on the Canadian Ingredient Disclosure List.

**Section 16 - Additional Information**

**MSDS Creation Date:** 7/28/1999

**Revision #4 Date:** 10/03/2005

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