

Pentachlorophenol, tech., 86%
ACROS63018

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

MSDS Name: Pentachlorophenol, tech., 86%

Catalog Numbers:

AC161120000, AC161120010

Synonyms:

PCP; 1-Hydroxypentachlorobenzene; 2,3,4,5,6-Pentachlorophenol;
Penchlorol; Pentachlorofenol; Pentachlorophenate; Phenol,
pentachloro-

Company Identification (Europe): Acros Organics N.V.
Janssen Pharmaceuticaaan 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#
87-86-5	Pentachlorophenol	86.0	201-778-6

Hazard Symbols: T N

Risk Phrases: 26 36/37/38 40 24/25 50/53

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: dark colored.

Danger! Dangerous to the environment. Possible risk of irreversible effects. May cause cardiac disturbances. May cause lung damage. May cause liver and kidney damage. Causes eye and skin irritation. Causes digestive and respiratory tract irritation. May cause cancer based on animal studies. May cause blood abnormalities. May cause fetal effects. May be fatal if swallowed, absorbed through the skin or inhaled.

Target Organs: Kidneys, liver, lungs, immune system, nervous system, circulatory system.

Potential Health Effects

Eye:

Causes eye irritation and possible burns. May cause visual damage, inflammation of the conjunctiva, corneal opacity and slight physiologic dilatation of the pupil.

Skin:

May be fatal if absorbed through the skin. Substance is rapidly absorbed through the skin. Causes symptoms similar to those of inhalation. Causes skin irritation and possible burns.

Ingestion:

May be fatal if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver and kidney damage. May cause effects similar to those of acute inhalation.

Inhalation:

May be fatal if inhaled. May cause increased perspiration, increased temperature, increased heart rate, increased breathing, weakness, nausea, vomiting, abdominal pain, headache, Systemic intoxication is cumulative and has been fatal. May cause violent sneezing and coughing. Inhalation may cause damage to the circulatory system and heart and possible death due to cardiac failure. Causes irritation of the mucous membrane and upper respiratory tract.

Chronic:

Possible cancer hazard based on tests with laboratory animals. May cause liver and kidney damage. Animal studies have reported that fetal effects/abnormalities may occur when maternal toxicity is seen. Chronic exposure has resulted in an increase prevalence of conjunctivitis, sinusitis, bronchitis, polyneuritis, and dermatitis. Exposure may cause blood effects and bone marrow damage. Chronic exposure may cause lung damage. Laboratory experiments have resulted in mutagenic effects.

**** 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.

Skin:

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

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. Induce vomiting by giving one teaspoon of Syrup of Ipecac.

Inhalation:

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

Notes to Physician:

Treat symptomatically and supportively. Persons with pre-existing skin disorders or impaired respiratory or pulmonary function may be at increased risk to the effects of this substance. Effects may be delayed.

Antidote:

Do not administer atropine, aspirin, or other salicylates to control hyperthermia. Reduction of hyperthermia with tepid water baths is superior to alcohol sponging or ice-packs which tend to constrict peripherally. Replace fluid and electrolytes.

**** 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. Water runoff can cause environmental damage. Dike and collect water used to fight fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use extinguishing media most appropriate for the surrounding fire. Cool containers with flooding quantities of water until well after fire is out.

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

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

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

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

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Use only in a chemical fume hood.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Poison room locked.

**** 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 only under a chemical fume hood.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA-FinalPELs
Pentachlorophenol	0.5 mg/m ³ ; skin - potential for cutaneous absorption	0.5 mg/m ³ TWA 2.5 mg/m ³ IDLH	0.5 mg/m ³ TWA

OSHA Vacated PELs:

Pentachlorophenol:
0.5 mg/m³ TWA

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 a respirator's use.

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

Physical State:	Solid
Appearance:	dark colored
Odor:	Benzene like
pH:	Not available.
Vapor Pressure:	40 mm Hg @ 211.2 C
Vapor Density:	9.2
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	310 deg C @ 760.00mmHg
Freezing/Melting Point:	190-191 C
Autoignition Temperature:	Not applicable.
Flash Point:	Not applicable.
NFPA Rating:	(est.) Health: 3; Flammability: 0; Reactivity: 0
Explosion Limits, Lower:	Not available.
Upper:	Not available.
Decomposition Temperature:	310 deg C
Solubility:	slightly soluble
Specific Gravity/Density:	1.9790g/cm3
Molecular Formula:	C6HCl5O
Molecular Weight:	266.33

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

- Chemical Stability: Stable under normal temperatures and pressures.
- Conditions to Avoid: Incompatible materials, dust generation, excess heat.
- Incompatibilities with Other Materials: Strong oxidizing agents, strong bases, acid anhydrides, alkalies, acid chlorides, organic materials.
- Hazardous Decomposition Products: Hydrogen chloride, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, chlorinated phenols.
- Hazardous Polymerization: Will not occur.

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

RTECS#:

CAS# 87-86-5: SM6300000

LD50/LC50:

CAS# 87-86-5: Inhalation, mouse: LC50 =225 mg/m³; Inhalation, rat: LC50 =355 mg/m³; Oral, mouse: LD50 = 117 mg/kg; Oral, rat: LD50 = 27 mg/kg; Skin, rat: LD50 = 96 mg/kg.

Carcinogenicity:

Pentachlorophenol -

ACGIH: A3 - Animal Carcinogen

California: carcinogen; initial date 1/1/90

Epidemiology:

Oral, mouse: TDLo = 8736 mg/kg/2Y-C (Tumorigenic - Carcinogenic by RTECS criteria - Endocrine - tumors).; Subcutaneous, mouse: TDLo = 46 mg/kg (Tumorigenic - equivocal tumorigenic agent by RTECS criteria - Lungs, Thorax, or Respiration - tumors and Liver - tumors).

Teratogenicity:

Oral, rat: TDLo = 60 mg/kg (female 9 day(s) after conception) Effects on Embryo or Fetus - fetotoxicity (except death, e.g., Stunted fetus).; Oral, rat: TDLo = 50 mg/kg (female 6-15 day(s) after conception) Specific Developmental Abnormalities - musculoskeletal system.; Oral, rat: TDLo =4 gm/kg (female 77 day(s) pre-mating - 28 day(s) post-birth) Effects on Newborn - weaning or lactation index(e.g., # alive at weaning per # alive at day 4) and Effects on Newborn - growth statistics (e.g.%, reduced weight gain).;Subcutaneous, mouse: TDLo = 450 mg/kg (female 6-14 day(s) after conception) E

Reproductive Effects:

No information available.

Neurotoxicity:

No information available.

Mutagenicity:

Morphological Transformation: Hamster, Embryo = 100 mg/L.; Cytogenetic Analysis: Hamster, Ovary = 80 mg/L.; Sister Chromatid Exchange: Hamster, Ovary = 3 mg/L.

Other Studies:

Open irritation test: Administration onto the skin (rabbit) 10 mg/24H (Mild). Standard Draize Test: Administration into the eye (rabbit) = 100 uL/24H (Mild).

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

Ecotoxicity:

Fish: Rainbow trout: LC50 = 0.052 mg/L; 96 Hr; Static bioassay at 11C(pH 7.2-7.5)Fish: Fathead Minnow: LC50 = 0.205 mg/L; 96 Hr; Static bioassay at 20C (pH 7.2-7.5)Fish: Bluegill/Sunfish: LC50 = 0.032 mg/L; 96 Hr; Static bioassay at 15C (pH 7.2-7.5)Bacteria: Phytobacterium phosphoreum: EC50 = 0.519 mg/L; 30 min; Microtox testAlgae: Green algae: EC50 = 0.09 mg/L; 96 Hr; UnspecifiedIn soil, pentachlorophenol will slowly biodegrade and leaching into ground water is expected. When released into water it adsorbs considerably to sediment, photodegrades (especially at higher pHs) and slowly biodegrades. Pentachlorophenol is expected to moderately

Other

Harmful to aquatic life in very low concentrations.

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

Chemical waste generators must determine whether a discarded chemical is class if as a hazardous waste.US EPA guidelines for the classification determination are listed in 40 CFR Part Additionally, waste generators must consult state and local hazardous waste regu ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT

Shipping Name: PENTACHLOROPHENOL

Hazard Class: 6.1

UN Number: UN3155

Packing Group: II

Canadian TDG

No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA

CAS# 87-86-5 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.

SARA

Section 302 (RQ)

CAS# 87-86-5: final RQ = 10 pounds (4.54 kg)

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

Section 313

This material contains Pentachlorophenol (CAS# 87-86-5, 86 0%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.

Clean Air Act:

CAS# 87-86-5 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# 87-86-5 is listed as a Hazardous Substance under the CWA.

CAS# 87-86-5 is listed as a Priority Pollutant under the Clean Water Act.

CAS# 87-86-5 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

Pentachlorophenol can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts. The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:

WARNING: This product contains Pentachlorophenol, a chemical known to the state of California to cause cancer.

California No Significant Risk Level:

CAS# 87-86-5: no significant risk level = 40 ug/day

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T N

Risk Phrases:

R 26 Very toxic by inhalation.

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 40 Possible risks of irreversible effects.

R 24/25 Toxic in contact with skin and if swallowed.

R 50/53 Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 22 Do not breathe dust.

S 36/37 Wear suitable protective clothing and gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 52 Not recommended for interior use on large surface areas.

S 60 This material and/or its container must be disposed of as hazardous waste.

S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

WGK (Water Danger/Protection)

CAS# 87-86-5: 3

United Kingdom Occupational Exposure Limits

CAS# 87-86-5: OES-United Kingdom, TWA 0.5 mg/m³ TWA

CAS# 87-86-5: OES-United Kingdom, STEL 1.5 mg/m³ STEL

Canada

CAS# 87-86-5 is listed on Canada's DSL/NDSL List.

This product has a WHMIS classification of D1A, D2A.

CAS# 87-86-5 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 87-86-5: OEL-AUSTRALIA:TWA 0.5 mg/m³;Skin

OEL-BELGIUM:TWA 0.5 mg/m³;Skin

OEL-DENMARK:TWA 0.05 ppm (0.5 mg/m³);Skin

OEL-FINLAND:TWA 0.5 mg/m³;STEL 1.5 mg/m³;Skin

OEL-FRANCE:TWA 0.5 mg/m³;Skin

OEL-GERMANY:TWA 0.005 ppm (0.05 mg/m³);Skin

OEL-HUNGARY:TWA 0.2 mg/m³;STEL 0.4 mg/m³;Skin

OEL-JAPAN:TWA 0.5 mg/m³;Skin

OEL-THE NETHERLANDS:TWA 0.5 mg/m³;Skin

OEL-THE PHILIPPINES:TWA 0.5 mg/m³;Skin

OEL-RUSSIA:STEL 0.1 mg/m³;Skin

OEL-SWEDEN:TWA 0.5 mg/m³;STEL 1.5 mg/m³;Skin JAN9

OEL-SWITZERLAND:TWA 0.05 ppm (0.5 mg/m³);STEL 0.1 ppm;Skin

OEL-TURKEY:TWA 0.5 mg/m3;Skin
OEL-UNITED KINGDOM:TWA 0.5 mg/m3;STEL 1.5 mg/m3;Skin
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 5/12/1999 Revision #2 Date: 8/02/2000

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.
