

Use Profile

A. Chemical Overview

Common Name:	Pentachlorophenol
Chemical Name:	Pentachlorophenol
CAS Registry Number:	87-86-5
OPP Chemical Code:	63001
Case Number:	2505
Molecular Formula:	C ₆ HCl ₅ O
Molecular Weight:	266.35 g/mol
Percent of Active Ingredient in Technical Product:	96% (Crystalline Solid)
Trade and Other Names:	PCP
Basic Manufacturers:	KMG- Bernuth, Inc. Vulcan Chemicals, Co.

B. Use Profile

The following is information on the currently registered uses with an overview of use sites and application methods.

TYPE OF PESTICIDE: Bactericide
Fungicide/Fungistat
Mildewcide
Insecticide

____USE SITES: **Aquatic Non-Food Industrial**
Marine Structures/ Equipment

Terrestrial Non-Food Crop

Forest Products (Seasoned)

Non Agricultural Areas/Soils (Utility Poles)

Fencerows/Hedgerows

USE SITES (cont.): **Outdoor Residential**

Wood Protection Treatment to Buildings/Products

Fencerows/Hedgerows

TARGET PESTS: Mold, Fungal Rot, Wood Stain Fungi, Wood Destroying Insects, Termites, Carpenter Ants, Powderpost Beetles, Lyctus Powderpost Beetles

FORMULATION
TYPES

REGISTERED: Soluble Concentrate/Liquid
Crystalline
Impregnated Material
Emulsifiable Concentrate
Liquid-Ready to Use

METHODS & RATES OF APPLICATION:

Seasoned Forest Products- Vacuum Pressure Injection and Pressure Treatment - Maximum of 4.123 lb active ingredient in 10 gallons of solvent.

Seasoned Forest Products- Low Pressure Injection Treatment - maximum of 3.825 lb active ingredient per pole.

Outdoor Residential (Buildings/Finished Wood Products) -Low Pressure Injection Treatment for - maximum of 2.625 lb active ingredient per pole.

Pentachlorophenol is a standardized oil-borne preservative in the AWPB Book of Standards under P8, Section 1. Solvents used to prepare solutions of pentachlorophenol shall comply with the AWPB Book of Standards under P9. Reference UCS Section 4, Standard Preservative Code No. 104 or 105.

C. Regulatory History

The production of PCP for wood preserving began on an experimental basis in the 1930s. In 1947 nearly 3,200 metric tons of PCP were reported to have been used in the U.S. by the commercial wood preserving industry. Pentachlorophenol (PCP) was one of the most widely

used biocides in the United States prior to regulatory actions to cancel and restrict certain non-wood preservative uses of PCP in 1987. Prior to the 1987 Federal Register Notice (Vol. 52, No. 13) which canceled and restricted certain non-wood uses, pentachlorophenol was registered for use as a herbicide, defoliant, mossicide, and as a disinfectant.

Indoor applications of pentachlorophenol are prohibited. These restrictions were imposed on pentachlorophenol registrations as part of the Agency's Special Review process as indicated in the *U.S.EPA Position Document 4 for Wood Preservative Pesticides: Creosote, Pentachlorophenol and Inorganic Arsenicals (1984, amended 1986)*. The use of pentachlorophenol to treat wood intended for use in interiors is prohibited, except for a few low exposure uses (i.e., those support structures which are in contact with the soil in barns, stables, and similar sites and which are subject to decay or insect infestation). Pentachlorophenol is a restricted use pesticide for sale and use by certified applicators only.

In 2000, the EPA canceled 12 products containing pentachlorophenol due to the registrant's failure to pay registration maintenance fees. This resulted in cancellation of all uses of pentachlorophenol as a remedial treatment (a non-pressure treatment using a brush) of utility poles.

Currently, the Agency has received requests by the registrants of pesticide products containing Pentachlorophenol to voluntarily amend to terminate certain uses of affected products. Two registrants, KMG Chemicals, Inc. and Vulcan Chemicals, are requesting this action effective immediately. KMG Chemicals, Inc., is requesting that all non-pressure treatment and non-thermal treatments for their product (Pentacon 40) be deleted. Vulcan Chemicals is requesting to voluntarily cancel spray uses for two of their products (Vulcan GLAZD Penta and Vulcan Premium Four Pound [PCP-2] Concentrate). The Agency is preparing a Federal Register Notice to process these requests. This action would leave only pressure and thermal treatments of pentachlorophenol.

There are currently 10 active products containing pentachlorophenol listed in the EPA OPPIN database for chemical code 63001. *They are as follows:*

<u>Products</u>	<u>%Active Ingredients</u>
5382-16	96%
5382-36	41%
61483-1	4.8%
61483-2	40%
61483-3	96%
61483-55	5%
61483-56	40%
61483-57	48%
61483-58	7%
61483-59	10.42%