



IARC MONOGRAPHS

# PENTACHLOROPHENOL AND SOME RELATED COMPOUNDS

VOLUME 117

IARC MONOGRAPHS  
ON THE EVALUATION  
OF CARCINOGENIC RISKS  
TO HUMANS

International Agency for Research on Cancer



World Health  
Organization



**PENTACHLOROPHENOL  
AND SOME RELATED  
COMPOUNDS**

VOLUME 117

This publication represents the views and expert opinions of an IARC Working Group on the Evaluation of Carcinogenic Risks to Humans, which met in Lyon, 4–11 October 2016

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## IARC MONOGRAPHS

In 1969, the International Agency for Research on Cancer (IARC) initiated a programme on the evaluation of the carcinogenic risk of chemicals to humans involving the production of critically evaluated monographs on individual chemicals. The programme was subsequently expanded to include evaluations of carcinogenic risks associated with exposures to complex mixtures, lifestyle factors and biological and physical agents, as well as those in specific occupations. The objective of the programme is to elaborate and publish in the form of monographs critical reviews of data on carcinogenicity for agents to which humans are known to be exposed and on specific exposure situations; to evaluate these data in terms of human risk with the help of international working groups of experts in carcinogenesis and related fields; and to indicate where additional research efforts are needed. The lists of IARC evaluations are regularly updated and are available on the Internet at <http://monographs.iarc.fr/>.

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This volume of the *IARC Monographs* provides evaluations of the carcinogenicity of pentachlorophenol, 2,4,6-trichlorophenol, 3,3',4,4'-tetrachloroazobenzene, aldrin, and dieldrin.

Pentachlorophenol, aldrin, and dieldrin are classified as persistent organic pollutants under the Stockholm Convention. Pentachlorophenol has been widely used as a wood preservative and insecticide, but its production and use are now restricted. 2,4,6-Trichlorophenol has also been used as a wood preservative and insecticide, and in the synthesis of some fungicides. Aldrin and dieldrin are synthetic organochlorine pesticides used as broad-spectrum soil insecticides for the protection of various food crops, as seed dressings, and to control infestations of pests such as ants and termites. In several countries their use has been banned or severely restricted since the early 1970s. 3,3',4,4'-Tetrachloroazobenzene is not manufactured commercially but is formed during the production and degradation of chloroanilide herbicides such as propanil, linuron, and diuron.

Exposure to all five agents considered may occur in the general population as well as in various occupational settings.

An *IARC Monographs* Working Group reviewed epidemiological evidence, animal bioassays, and mechanistic and other relevant data to reach conclusions as to the carcinogenic hazard to humans of these agents.

