

WORLD HEALTH ORGANIZATION
INTERNATIONAL AGENCY FOR RESEARCH ON CANCER



IARC MONOGRAPHS
ON THE EVALUATION
OF CARCINOGENIC
RISKS TO HUMANS

VOLUME 77
SOME INDUSTRIAL CHEMICALS

2000
I A R C
L Y O N
F R A N C E



WORLD HEALTH ORGANIZATION

INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IARC MONOGRAPHS
ON THE
EVALUATION OF CARCINOGENIC
RISKS TO HUMANS

Some Industrial Chemicals

VOLUME 77

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,
15–22 February 2000

2000

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, life-style 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 chemical 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 Internet: <http://www.iarc.fr/>, under Publications.

This project was supported by Cooperative Agreement 5 UO1 CA33193 awarded by the United States National Cancer Institute, Department of Health and Human Services. Additional support has been provided since 1986 by the European Commission, since 1993 by the United States National Institute of Environmental Health Sciences and since 1995 by the United States Environmental Protection Agency through Cooperative Agreement Assistance CR 824264.

©International Agency for Research on Cancer, 2000

Distributed by IARCPress (Fax: +33 4 72 73 83 02; E-mail: press@iarc.fr)
and by the World Health Organization Distribution and Sales, CH-1211 Geneva 27
(Fax: +41 22 791 4857; E-mail: publications@who.int)

Publications of the World Health Organization enjoy copyright protection in accordance with the provisions of Protocol 2 of the Universal Copyright Convention.

All rights reserved. Application for rights of reproduction or translation, in part or *in toto*, should be made to the International Agency for Research on Cancer.

IARC Library Cataloguing in Publication Data

Some industrial chemicals /

IARC Working Group on the Evaluation of Carcinogenic Risks to Humans
(2000 : Lyon, France)

(IARC monographs on the evaluation of carcinogenic risks to humans ; 77)

1. Carcinogens – congresses 2. Occupational Exposure – congresses I. IARC Working Group on the Evaluation of Carcinogenic Risks to Humans II. Series

ISBN 92 832 1277 0
ISSN 1017-1606

(NLM Classification: W1)

PRINTED IN FRANCE