



**German Chemical Society
Gesellschaft Deutscher Chemiker**

GDCh-Advisory Committee
on Existing Chemicals of
Environmental Relevance (BUA)

BUA Reports 71 - 73

Benzal chloride

BUA Report 71 (December 1991)

Benzotrichloride

BUA Report 72 (December 1991)

Benzoyl chloride

BUA Report 73 (December 1991)



S. Hirzel

Wissenschaftliche Verlagsgesellschaft 1997

GDCh-Advisory Committee on Existing Chemicals of Environmental Relevance (BUA)

Chairman:

Prof. Dr. E. Bayer, Institut für Organische Chemie der Universität Tübingen

Members:

Dr. G. Alfke, Mineralölwirtschaftsverband e. V., Hamburg
Prof. Dr. K. Ballschmiter, Abteilung Analytische Chemie und Umweltchemie der Universität Ulm
Dr. R. Bias, BASF AG, Emissionsüberwachung und Ökologie, Ludwigshafen a. Rh.
Dr. B. Broecker, HOECHST AG, Abteilung Umweltchemikalien/Verbrauchersicherheit, Frankfurt am Main
Prof. Dr. O. Fränze, Geographisches Institut der Universität Kiel
Prof. Dr. F. H. Frimmel, DVGW-Forschungsstelle am Engler-Bunte-Institut der Universität Karlsruhe
Prof. Dr. H.-P. Gelbke, BASF AG, Toxikologie, Ludwigshafen a. Rh.
Prof. Dr. H. Greim, GSF - Institut für Toxikologie, Neuherberg (Vice Chairman)
Dr. H. Jungen, Deutsche Wissenschaftliche Gesellschaft für Erdöl, Erdgas und Kohle e. V., Hamburg
Dir. und Prof. Dr. D. Kayser, Bundesgesundheitsamt, Berlin
Prof. Dr. P. Müller, Institut für Biogeographie, Universität des Saarlandes, Saarbrücken
Prof. Dr. E. Offhaus, Umweltbundesamt, Berlin
Dr. R. Ott, Deutsche Shell Chemie GmbH, Eschborn/Ts.
Prof. Dr. U. Schlottmann, Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit, Bonn
Dr. N. Schön, BAYER AG, LE Umweltschutz/AWALU, Leverkusen
Dr. A. Troge, Umweltbundesamt, Berlin

Guests:

Dr. K. H. Adlfinger, Initiative umweltrelevante Altstoffe, Frankfurt am Main
Prof. Dr. R. Kümmel, Technische Hochschule Leuna-Merseburg
Prof. Dr. Dr. W. Mücke, Institut für Toxikologie und Umwelthygiene der TU München
Dr. J. Oberhansberg, BG Chemie, Heidelberg

In collaboration with:

Priv.-Doz. Dr. J. Ahlers, Umweltbundesamt, Berlin
Dr. S. Ettl, Institut für Organische Chemie der Universität Tübingen
Dr. R. Koch, Bayer AG, Umweltschutz, Leverkusen
Frau Dr. U. Koch, Bayer AG, Toxikologie, Wuppertal
Dr. W. Koch, Umweltbundesamt, Berlin
Frau Dr. I. Mangelsdorf, GSF - Institut für Toxikologie, Neuherberg
Frau Dr. H. Sterzl-Eckert, GSF - Institut für Toxikologie, Neuherberg
Dr. D. Vogel, Institut für Organische Chemie der Universität Tübingen
Frau Dipl.-Biol. L. Weis, Institut für Organische Chemie der Universität Tübingen
Frau Dr. K. Widmann, Institut für Organische Chemie der Universität Tübingen

GDCh Office:

Dr. H. Behret, GDCh, Frankfurt am Main

BUA Reports 71 - 73

Benzal chloride

BUA Report 71 (December 1991)

Benzotrichloride

BUA Report 72 (December 1991)

Benzoyl chloride

BUA Report 73 (December 1991)

edited by the GDCh-Advisory
Committee on Existing Chemicals
of Environmental Relevance

Beratergremium für
Umweltrelevante Altstoffe (BUA)



S. Hirzel

Wissenschaftliche Verlagsgesellschaft 1997

Dr. H. Behret
Gesellschaft Deutscher Chemiker
Postfach 90 04 40
D-60444 Frankfurt am Main

Translated by P. Arend

This book was carefully produced. Nevertheless, authors, editors and publisher do not warrant the information contained therein to be free of errors. Readers are advised to keep in mind that statements, data, illustrations, procedural details or other items may inadvertently be inaccurate.

The use of general descriptive names, trade names, trademarks, etc. in a publication, even if not specifically identified, does not imply that these names are not protected by the relevant law and regulations.

Die Deutsche Bibliothek — CIP-Einheitsaufnahme

Benzal chloride : (December 1991). **Benzotrichloride** : (December 1991) [u.a.] - Ed by the GDCh Advisory Committee on Existing Chemicals of Environmental Relevance [Transl. by P. Arend]. - Stuttgart: Hirzel ; Stuttgart : Wiss. Verl.-Ges., 1997

(BUA report; 71/73)

Dt. Ausg. u.d.T.: Benzalchlorid

ISBN 3-7776-0751-7

NE: Arend, P. [Übers.]; Benzotrichloride; Gesellschaft Deutscher Chemiker / Beratergremium für Chemiker / Beratergremium für Umweltrelevante Altstoffe: BUA report

All rights reserved. No part of this publication may be translated, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without permission in writing from the publisher.

© 1997 S. Hirzel Verlag, Birkenwaldstraße 44, 70191 Stuttgart

Printed in acid-free and low-chlorine paper.

Printing and binding: Druckhaus Beltz, Hemsbach
Printed in F.R. Germany

Foreword

The German Chemicals Act (Chemikaliengesetz - ChemG) of 1980 stipulates that certain existing chemicals must be reported to the competent authority, if they exhibit properties which indicate that they may be hazardous, either alone or in combination with other substances.

In the summer of 1982, an Advisory Committee on Existing Chemicals of Environmental Relevance (BUA) was set up by the German Chemical Society (Gesellschaft Deutscher Chemiker - GDCh). It brings together representatives from the scientific community, the chemical industry and the governmental authorities. This Advisory Committee is responsible for elaborating appropriate solutions for substances of relevance for health and the environment on the basis of voluntary measures. It selects and examines existing chemicals from the aforementioned angles. The testing and evaluation are based on scientific criteria alone.

It was, therefore, necessary to develop priority setting procedures. In a first phase reports were only prepared for priority chemicals. Within the framework of a first priority setting procedure, chemicals were compiled from several priority lists and 135 chemicals were selected for detailed substance reports.

In a second priority setting procedure the survey of the German Chemical Industry Association (VCI) on all substances with a production volume of more than 10 tons per year was used as a starting list. Since this survey covered 4,600 chemicals, BUA decided to process the corresponding list in several stages. The first stage included approx. 1,050 substances with a production volume of more than 1,000 tons per year.

Detailed reports are drawn up on chemicals suspected of having a hazard potential and abridged reports on those presenting only a minor hazard potential, according to the current state of knowledge.

The detailed BUA reports take in both the published literature and data from industry. If data for the evaluation of the chemicals are not available, additional studies are recommended and the results are published as updates to the reports. The reports serve as a basis for the instigation of administrative measures, when there are indications of risks to health or the environment.

Tübingen, May 1993

Ernst Bayer
Chairman of the Advisory Committee
on Existing Chemicals
of Environmental Relevance

Benzal chloride

BUA Report 71
(December 1991)

edited by the GDCh-Advisory
Committee on Existing Chemicals
of Environmental Relevance

Beratergremium für
Umweltrelevante Altstoffe (BUA)

Contents

Benzal chloride

1.	Chemical name	1
2.	Production, use, discharge into the environment	2
3.	Occurrence in the environment	4
4.	Behaviour in the environment.....	4
5.	Ecotoxicity	4
6.	Toxicity to warm-blooded animals (Text: BG Chemie)	6
7.	Summary	8
8.	Literature	9
Annex: Substance data set of Bayer AG		1-12