

Water Treatment  
Chemicals  
An Industrial Guide

Ernest W. Flick

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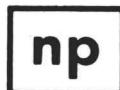
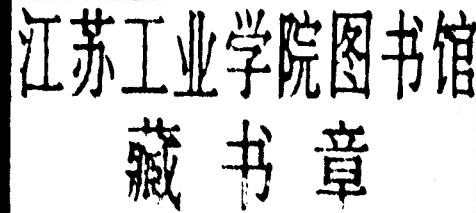
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# WATER TREATMENT CHEMICALS

## An Industrial Guide

by

Ernest W. Flick



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## **WATER TREATMENT CHEMICALS**

© 1990 W.R. Grace & Co.

*To  
Carl, Heath  
and  
Charlotte Morgan*

# Preface

This industrial guide contains data on more than 1,300 water treatment chemicals, applications, and services. It is based on information received from 76 manufacturers and distributors of these products and services. The data represent selections from manufacturers' descriptions made at no cost to, nor influence from, the makers or distributors of these materials.

The market for water treatment chemicals has been strong for the past few years and is expected to continue to expand. The specialty chemical market (industrial) has grown, and continues to grow, more rapidly than the commodity chemical market (municipal, institutional, residential, commercial) due to the ever-changing federal and state regulatory climate. Annual U.S. sales of water treatment chemicals are currently \$2.5 billion. The industrial, specialty chemical market accounts for about 47% of the dollar volume, while municipalities and institutions use 48%, and residential and commercial sales account for about 5%. The specialty chemical market is projected to expand about 6.7%/year for the next few years.

The water service industry covers, in addition to individual specialty and commodity chemicals; water treatments or "applications," i.e., treatments for cooling waters (the largest segment), boiler waters, wastewaters, water supply and process water; and other water services. The book covers each of these three areas—chemicals, applications, and services—in three different sections as shown below.

## I. CHEMICAL CLASSES

- Chelating Agents
- Coagulants and Flocculants
- Corrosion Inhibitors
- Filter Media and Adsorbents
- Oxidizers and Disinfectants
- pH Adjusters and Softeners
- Salts
- Miscellaneous

## II. APPLICATIONS

- Boiler Water Treatment
- Cooling Water Treatment
- Wastewater Treatment
- Pool and Spa Water Treatment

## III. COMPANY PRODUCTS AND SERVICES

It is believed that all of the products listed are currently available, which will be of interest to readers concerned with raw material discontinuances. The book will be of value to technical and managerial personnel involved in the control and treatment of water systems, as well as to suppliers of basic raw materials.

Each product is located in the chapter which is most applicable. The reader seeking a particular type of product should check each chapter which could possibly apply. The information provided for each product includes, in the manufacturer's own words, as available:

Product Category
Company Name
Trade Name
Product Number
Product Description
Properties/Characteristics

Also included in the book are a list of Suppliers' Addresses and a Trade Name Index.

My fullest appreciation is expressed to the companies and organizations which supplied the data included in the book.

August, 1991

Ernest W. Flick

#### **NOTICE**

To the best of our knowledge the information in this publication is accurate; however, the Publisher does not assume any responsibility for the accuracy or completeness of, or consequences arising from, such information. This industrial guide does not purport to contain detailed user instructions, and by its range and scope could not possibly do so. Mention of trade names or commercial products or processes does not constitute endorsement or recommendation for use by the Publisher.

In some cases water treatment chemicals could be toxic, and therefore due caution should be exercised. Final determination of the suitability of any information, product, treatment, or process for use contemplated by any user, and the manner of that use, is the sole responsibility of the user. We strongly recommend that users seek and adhere to a manufacturer's or supplier's current instructions for handling each material they use.

The Author and Publisher have used their best efforts to include only the most recent data available. The reader is cautioned to consult the supplier in case of questions regarding current availability.

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