



## Book Review

### **A Comprehensive Guide to the Hazardous Properties of Chemical Substances (2nd Edition)**

Pradyot Patnaik; John Wiley and Sons, Inc., New York, 1999, xxiii + 984 pages, £122.00, ISBN 0-471-29175-7

The hazardous properties of chemical compounds encompass many diverse topics: these include toxicology, explosive nature, disposal and exposure limits. Such important topics can each be the basis for an individual book. Several major reference books exist, *Sax's Dangerous Properties of Industrial Materials* being universally regarded as the most comprehensive and definitive reference 'bible'. Many of these works, however, have important limitations. There is an additional requirement that is often overlooked: to correlate the hazardous properties of compounds to their chemical structure and functionality, and thus enable prediction or assessment of toxicity and hazards when experimental data are minimal or non-existent.

A Comprehensive Guide to the Hazardous Properties of Chemical Substances (2nd Edition): provides the chemical structures of over 1500 chemicals from 46 different groups. This update of the 1992 version adds 1000 new entries under specific classes of compounds. *Part A* highlights four of the primary hazardous properties: toxicity, carcinogenicity, flammability and explosive

characteristics. *Part B* presents a comprehensive discussion of individual substances and classes of substances. Fifteen new chapters include features on teratogenic and addictive substances, organometallic compounds, sulphur mustards and esters. An up-to-date review of synonyms, CAS numbers, physical properties, chemical analyses and EPA and DOT status is included. Coverage of pesticides and herbicides has been expanded significantly. The book includes an extensive set of literature references to current analytical methods.

This book is a valuable reference volume that complements other available major references. It is highly recommended, not only for analytical and investigative scientists, but also for anyone who deals with industrial safety and hygiene, hazardous waste, compliance issues or many other related topics.

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