

## BOOK REVIEW

**Ullmann's encyclopedia of industrial inorganic chemicals & products. 1999, Wiley-VCH, Weinheim.** Printed pages 5358 (6 volumes); price: DM 3980.00. ISBN 3-527-29567-4

**Industrial organic chemicals, an Ullmann's encyclopedia. 1999, Wiley-VCH, Weinheim.** Printed pages 5184 (8 volumes); price: DM 4950.00. ISBN 3-527-29645-X

There will be hardly any chemist who does not know Ullmann's encyclopedia of technical chemistry. From edition to edition, Ullmann's encyclopedia expanded and the language later changed from German to English. It kept its general character of being a comprehensive reference source for technical chemistry; however, inclusion of many other fields, which are relevant for technical chemists as well, for example analytical methods, let the number of volumes grow to 37! Therefore it was a good idea to extract from the last edition two separate sets of books devoted to inorganic and organic industrial chemicals, respectively. However, it was not just an extraction of articles, but also a revision and updating which led to the present editions of these two "little Ullmann's", which will find many good friends, I am sure. In the case of the "Industrial organic chemicals", the updating is very good, whereas in the inorganic encyclopedia the inclusion of the last decade is somewhat incomplete.

The single articles are generally subdivided into the parts "Physical properties", "Chemical properties", "Production", "Safety precautions, transportation, and storage", and "Toxicol-

ogy and occupational health". The information provided is extremely useful for everybody in industry and academics who needs to know what chemicals are produced, how they are produced, and what are their properties. The information provided on production, physical, and chemical properties, methods of purification, etc., are very well selected. Especially the well-referenced toxicological data are of great value and their inclusion was an absolute must. In forthcoming editions it would be desirable to give for many more compounds the  $pK_a$  values (acidity constants) than is the case in this edition, where these data are provided only for the most common acids. The same holds true for many other equilibrium constants. Of course, confining the content to technical products means that the majority of chemical compounds cannot be found in these encyclopedias. That, however, cannot be expected and exactly the confinement to products of technical importance makes its value. No reviewer of such work will be able to critically read all volumes; however, I can safely say that, after using it already for some time, I was not at all disappointed but surprised how much I could find. The two editions are really useful to any chemist and not at all for technical chemists only. They are a superb source for research and teaching. The editing and printing quality is of highest standard. These two sets of "little Ullmann's" can be recommended and the publisher may think about similar editions on other specific topics, e.g. analytical methods.

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