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Book review

Gmelin Handbook of Inorganic Chemistry, 8th Edition, *Organotin Compounds*, Part 6. *Diorganotin Dichlorides and Organotin Trichlorides*. H. Schumann and I. Schumann, volume authors, H. Bitterer, volume editor, Gmelin Institut für Anorganische Chemie der Max-Planck-Gesellschaft zur Förderung der Wissenschaften and Springer-Verlag, Berlin/Heidelberg/New York, 1979, xx + 314 pages, DM 714, $ 392.70 (in German).

Diorganotin dichlorides and organotin trichlorides are important classes of organotin compounds. They are useful precursors to many other organotin chemicals, a number of which are of some commercial importance. The chemistry of R_2SnCl_2 compounds is much more developed than that of the trichlorides, $RSnCl_3$, which is reflected in the number of pages of this book devoted to each compound class: R_2SnCl_2, 210 pages; $RSnCl_3$, 78 pages. Among the diorganotin dichlorides are the commercially important $(CH_3)_2SnCl_2$, $(n\text{-}C_4H_9)_2SnCl_2$, $(n\text{-}C_8H_{17})_2SnCl_2$ and $(C_6H_5)_2SnCl_2$, all of which have been studied in great breadth and depth. To illustrate the thoroughness of the coverage which typifies the Gmelin Handbook, the section of the table of contents devoted to dimethyltin dichloride is reproduced below. Each subsection has its own bibliography. For instance, 117 references relating to the formation of

$(CH_3)_2SnCl_2$ are cited, and 59 to its NMR and NQR spectroscopy. The discussion of the chemistry of $(CH_3)_2SnCl_2$, $(n\text{-}C_4H_9)_2SnCl_2$ and $(C_6H_5)_2SnCl_2$ can only be illustrative, not exhaustive, because of the many studies which have used these compounds as starting materials. But the authors have chosen well, and a good general overview of the reactivity of these compounds can be obtained.

Also included in short sections are discussions of unsymmetrically substituted diorganotin dichlorides, $RR'SnCl_2$, those dichlorides in which the tin atom is part of a cyclic system and tin compounds of type R_2SnHCl, R_2SnFCl, $RSnHCl_2$ and $RSnFCl_2$

The thorough literature coverage is complete through the end of 1976. A perusal of some of the reference lists shows that not only the better known research journals are represented, but that also rather less well-known, even obscure, journals have been culled. Theses, conference reports and patents are cited as well. For a bibliography of reviews and general literature on organotin halides the reader is referred to Part 5 (reviewed in J. Organometal. Chem., 164 (1979) C39).

This volume has its own formula index, a feature which the user will appreciate. English translations of the preface, the table of contents, chapter titles and section headings serve to help the non-German reader. We hope that the Schumanns are keeping busy and that more volumes will join the present six very soon.

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