BOOK REVIEW

METHODEN DER ORGANISCHEN CHEMIE (Houben-Weyl). Fourth Edition. Edited by Eugen Müller. Volume XI, Part I. Stickstoffverbindungen II. Herstellung von Aminen. Pp. lviii + 1178 (including Index). Georg Thieme Verlag, Stuttgart, 1957. Moleskin DM. 208.00.

The present volume, the eighth to be published in the fourth edition of Houben-Weyl, and one of two to be devoted to the chemistry of nitrogenous compounds, is concerned entirely with the preparation of amines. Some idea of the scope and breadth of the information contained within this one volume can be gathered from the fact that it extends over nearly 1200 pages. The various preparative methods are classified under the following headings: direct amination, amination by substitution, by addition to olefinic substances, by reduction, by the use of organometallic compounds, by rearrangement, and by cleavage. The emphasis, throughout, is on practical methods, of which numerous examples are given, in sufficient detail for each experiment to be carried out without further reference to the original literature. Factors affecting the course, rate and yields of the various reactions are discussed in detail, as for example the influence of concentration, solvent, temperature and metal salts on the reaction between alkyl halides and ammonia or amines. As with the previous volumes in this series, much other useful information has been condensed into the many tables throughout the book, which briefly summarise large numbers of additional examples. It is this type of information which is particularly valuable to the practical organic chemist. Literature references up to 1956 are given throughout. Although price places this and the other volumes of this series outside the range of the average pocket, they will form valuable additions to any research library, helping to fill the ever important need for the classification of reaction methods.

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