

BOOK REVIEW

N. G. GAYLORD, Editor

Kunststoffe als Schutz gegen Korrosion, BRUNO WAESER, Dr. Alfred Huthig Verlag G.m.b.H., Heidelberg, 1963, 116 pp. 11.80 DM.

This small book is part of a series on the applied technology of polymers and plastics presumably similar to the series of familiar red books published in the U. S. by Reinhold. Dr. Waeser has distilled over 50 years of practical experience and lecturing on protective coatings to write this book which, due to its limited size, is a personal rather than encyclopedic treatment aimed at the practical man on the job. Although limited by space to being shallow, this book is never vague. Every statement is backed by specific illustration, citing the exact source and exact grade of polymer used. When industrial brochures are cited as source material, the reference is definite. Most, but not all, of the 240 references are from the German literature, which has been covered through 1961, and, in some cases, into early 1962. There is also a brief survey of the appropriate West German patent literature of the 1950's.

The first three-quarters of the book is devoted to the fundamentals of the use of plastics in the technology of corrosion. There is a brief historical review, a section on metallic corrosion, the requirements for plastic coatings, physical and chemical properties of many plastics, preparation of the metallic surface, the methods of application of coatings, and the advantages and disadvantages of several common plastics for coatings. The last quarter of this slim volume treats briefly the application of coatings as protection against the atmosphere under various conditions, water as vapor or liquid both pure and saline, soil, chemical attack, heat, uv light, nuclear radiation, and even outer space. An appendix discusses test methods and standardization.

For the reader at home in German this book would substitute for a series of up-to-date but introductory lectures on the use of plastics as coatings or replacements for corrodable metals. The English-speaking reader will find more material of a chemical nature in the 400-page Seymour and Steiner *Plastics for Corrosion-Resistant Applications* of 1955 and more background material in ACS Monograph #129, *Protective Coatings for Metals*, by Burns and Braclay, 600 pages, also of 1955. A thorough discussion of the physical aspects of diffusion and permeability is available in the chapter by Rogers in the 1964 *Engineering Design of Plastics*, edited by Baer.

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