## The Development and Use of Polyester Products, E. N. Doyle, McGraw-Hill, New York, 1969.

The author, a consultant, has stated the dual purpose of the book to be: "discuss every conceivable type of polyester product" and "give many new ideas with which to begin and suggest processing methods and means from which to work," in other words, to teach and to project. The treatment starts with the practical and the practice isolating uniqueness in the commercial sense.

The subject really is confined to unsaturated polyester resins, the so-called "styrene modified" copolymers of polyesterified glycol-maleic (fumeric) acids. As the student already knows, the modifications and permutations are legion. Every polyol and organic dibasic acid is fair game for optimization and beneficial proliferation of resins for the commercial market. This is the reason the subject is difficult to generalize, let alone to specify. The author has succeeded in demonstrating that he knows details to identify and present realities and limits. Only an encyclopedic treatment could improve on the subject.

The book is really a lecture directed to an audience of development chemists, production engineers, fabrication specialists, and market development programmers. The sermon is clear: "Here we stand now. These materials are tangent to every industrial product as improvements or replacements and in the sense of new concepts. Don't look at them through a long tube. See the future divergently. Whether the book is a text for brainstorming or inventing depends on the eye of the beholder."

This is not a book on the chemistry of resins yet gives type formulations without specific references. Join the prose with, for example, Bjorksten (*Polyesters and Their Application*, Rheinhold, 1956) and you develop a background with merit. It is a plenary account which teaches how to make floor tile, pour-in-place flooring, synthetic wall panels, tile, brick, and marble substitutes, simulated granite block facing, and bathroom fixtures. In fact, the author holds special promise for the future growth in construction and building accessories.

Manifestly, there can be no proof-positive in every hint and suggestion of serviceability vis-à-vis more conventional products. The section on coatings is in jeopardy. The reviewer agrees that polyester resins *can* be applied to many surfaces and for diverse good reasons as a test. The fact is that very few successes have been established in practice. The author can take shelter in the fact that good properties are inherent (polyesters are among the most durable of nonbaked coatings) and if formulators commission themselves to take care of the remaining problems, the benefits can be substantial.

There are spelling errors, e.g., analine. Many examples appeal to the conditional, i.e., "would or could" vs. "is or will." Applications in electrical and optical areas are covered. Reinforcement with fibers is treated under specific applications and more generally in respect to strength enhancement.

The short section on pp. 249–251 blends saturated polyester, e.g., glycol terephthalates, into the discussion of the prime subject in a way that could be misleading. This three-page footnote might have been omitted. An appendix of raw material suppliers has replaced the customary reference listing.

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