

# COATINGS MATERIALS AND SURFACE COATINGS

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Edited by  
**Arthur A. Tracton**



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# Preface

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The industries encompassing Paints, Inks, Coatings and Adhesives are closely interrelated. These materials are generally based on the same raw material components. The products may be considered to be composed of four categories of raw materials: resins, solvents, pigments and additives. Resins may be called binders, polymers, elastomers, and by their chemical name, such as acrylic, alkyd, nitrocellulose, etc. Their job is to hold the coating together and adhere it to the substrate. Solvents — organic or water — permit the coating to be applied to the substrate, and then they leave. Pigments come in many types. They are there for aesthetic (color) purposes, resistance properties or reinforcing properties. Additives are materials added in small quantities to modify the overall properties to meet a specification.

One of the main differences amongst the various industries is how the coating is applied. Techniques vary from stamping inks to spraying and baking at high temperature. Another major difference is the service and service life of the coating or ink. Will it be used inside or outside? Will it see heat? What temperature? What chemicals will be in the environment? How fast should it dry? There are many, many more questions.

The objective of this book is to acquaint the reader with some of the raw materials used in these industries. The book further extends these raw materials into various surface coatings. The coatings shown are not totally inclusive of all coatings and inks. Hopefully, the reader will take the data and expand the field of knowledge.

Arthur A. Tracton

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