

ORGANOBORON CHEMISTRY

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Vice President and Director of Research

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ORGANOBORON CHEMISTRY

- Volume 1* Boron-Oxygen and Boron-Sulfur Compounds
- Volume 2* Boron-Nitrogen and Boron-Phosphorus Compounds
- Volume 3* Boron-Carbon Compounds

Volume One

BORON-OXYGEN AND
BORON-SULFUR COMPOUNDS



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PREFACE

The purpose of this volume and the series of which it is a part is to correlate the voluminous and rapidly growing literature dealing with the organic chemistry of boron. It is hoped that in the process a broad and firm basis can be laid which will aid in the integration of the lore on the subject which will be recorded in the future.

In order to present in a finite and manageable volume as broad a coverage as possible with full integration of the many fragmentary bits of pertinent information, it was necessary to limit the report of experimental details to only those parameters which bear directly on the chemistry under discussion. The reader is referred to the original literature for more exacting details.

The first three chapters deal with the scope of the series in general and the nature and nomenclature of the compounds involved in the first volume. However, in the main, the present volume is generically oriented on a type of compound basis. Chapters 4 through 13 treat the chemistry of trigonal coplanar boron-oxygen compounds, and Chapters 14 through 19 are concerned with tetrahedral boron-oxygen compounds. The present state of boron-sulfur chemistry is summarized in Chapter 20, and Chapter 21 correlates the available hydrolytic kinetic data for the boron-oxygen compounds. Infrared assignments, bond energy, bond distance, and heat of formation data are recorded in the Appendices.

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