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Sommario/riassunto

"This book presents a comprehensive but concise overview of the production routes and technologies for levulinic acid, as well as its derivatives and commercial uses. Following an introduction to Levulinic Acid, including an overview of its history, properties, global market and direct uses, the book then goes on to cover the following topics in detail: ? Routes and technologies for the production of levulininc acid from biomass and fossil sources, including a brief discussion about existing commercial plants. ? Levulinate derivatives: discusses the main production routes and uses of organic and inorganic levulinate derivatives ? Levulinic acid hydrogenation: covers g-Valerolactone (GVL), Angelica lactone, 1,4-Pentanediol, 2-methyl-tetrahydrofuran (MTHF), hydrocarbons and other products of hydrogenation of Levulinic Acid, including discussion of production routes, technologies and main uses. ? Carbonyl reactions of levulinic acid: ketals and other derivatives formed upon reaction with the carbonyl group of levulininc acid, including discussion of production routes, technologies and main uses. ? Levulinic acid in the context of a biorefinery: other potential derivatives, process integration, and feedstock sources."--