Second edition

# CHEMISTRY AND TECHNOLOGY OF LUBRICANTS

Edited by R. M. Mortier and S. T. Orszulik



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# **Chemistry And Technology Of Lubricants**

Roy M. Mortier, Malcolm F. Fox, Stefan Orszulik

#### **Chemistry And Technology Of Lubricants:**

Chemistry and Technology of Lubricants R. M. Mortier, S. T. Orszulik, 2012-12-06 The use of lubricants began in ancient times and has developed into a major international business through the need to lubricate machines of increasing complexity The impetus for lubricant development has arisen from need so lubricating practice has preceded an understandingofthescientific principles. This is not surprising as the scientific basis of the technology is by nature highly complex and interdisciplinary However we believe that the under standing of lubricant phenomena will continue to be developed at a mol ecular level to meet future challenges These challenges will include the control of emissions from internal combustion engines the reduction of friction and wear in machinery and continuing improvements to lubricant performanceand life time More recently there has been an increased understanding of the chemical aspects of lubrication which has complemented the knowledge and under standing gained through studies dealing with physics and engineering This book aims to bring together this chemical information and present it in a practical way It is written by chemists who are authorities in the various specialisations within the lubricating industry and is intended to be of interest to chemists who may already be working in the lubricating industry or in academia and who are seeking a chemist s view of lubrication It will also be of benefit to engineers and technologists familiar with the industry who require more fundamental understanding oflubricants Chemistry and Technology of Lubricants Roy M. Mortier, Malcolm F. Fox, Stefan Orszulik, 2011-04-14 Chemistry and Technology of Lubricants describes the chemistry and technology of base oils additives and applications of liquid lubricants This Third Edition reflects how the chemistry and technology of lubricants has developed since the First Edition was published in 1992 The acceleration of performance development in the past 35 years has been as significant as in the previous century Refinery processes have become more precise in defining the physical and chemical properties of higher quality mineral base oils New and existing additives have improved performance through enhanced understanding of their action Specification and testing of lubricants has become more focused and rigorous Chemistry and Technology of Lubricants is directed principally at those working in the lubricants industry as well as individuals working within academia seeking a chemist's viewpoint of lubrication It is also of value to engineers and technologists requiring a more fundamental understanding of the subject Chemistry and Technology of Lubricants Roy M. Mortier, Malcolm F. Fox, Stefan Orszulik, 2010-11-16 Chemistry and Technology of Lubricants describes the chemistry and technology of base oils additives and applications of liquid lubricants This Third Edition reflects how the chemistry and technology of lubricants has developed since the First Edition was published in 1992 The acceleration of performance development in the past 35 years has been as significant as in the previous century Refinery processes have become more precise in defining the physical and chemical properties of higher quality mineral base oils New and existing additives have improved performance through enhanced understanding of their action Specification and testing of lubricants has become more focused and rigorous Chemistry and

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