

THIRD EDITION

Handbook of
Membrane Separations
Chemical, Pharmaceutical, Food,
and Biotechnological Applications



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The Membrane Handbook

**Anil K. Pabby, Syed S.H. Rizvi, Ana-
Maria Sastre**



The Membrane Handbook:

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Handbook Marco Stoller,Javier Miguel Ochando-Pulido,2014-12-23 The Boundary Flux Handbook summarizes over 90 chemical compounds single compounds in mixed solution and different feed streams from industry complex streams exiting the agricultural biological pharmaceutical food dye textile etc industries and the respective critical and threshold fluxes hereafter referred to the boundary flux together with data on rejection and permeabilities It gives the reader valuable data to quickly estimate membrane performances in respect to productivity selectivity and longevity and permits to estimate capital and operating costs of membrane processes during the plant design operations The book is valuable for scientific researchers and chemical engineers working with membrane technology as a reference for lab work membrane process design and control For each specific feedstock only the best performing membrane s are listed At least one commercial membrane module and a maximum of 4 different choices were reported in order to assure the possibility to easily integrate the proposed membranes into the systems by contacting the relevant commercial partner and to define the best choice of the pretreatment steps permitting quick membrane process optimization or revamping operations This text summarizes over 100 chemical compounds different feed streams from industry and the respective critical and threshold fluxes It gives the reader valuable data to quickly estimate membrane performances in respect to productivity selectivity and longevity For each studied feedstock only the best performing membrane s are listed including one commercial and a maximum of four different choices to assure the possibility to easily integrate the proposed membranes into the systems by contacting the relevant commercial partner The Essential Handbook of Polymer Terms and Attributes Munmaya K Mishra,Biao Duan,2024-07-30 The Essential Handbook of Polymer Terms and Attributes not only acts as an encyclopaedia of polymer science but also fosters an appreciation for the significance of polymers in fields including materials science chemistry engineering and medicine This book serves as an excellent reference book covering every possible term and attribution associated with the vast and diverse field of polymers This comprehensive volume serves as a vital resource for researchers working in industry and academia offering a clear and concise exploration of polymer science with the most essential reference data available Each polymer term is defined in a straightforward manner ensuring that readers of all levels can grasp the concepts The book goes beyond mere definitions providing context and insights into the applications properties and synthesis Bringing polymer terms and attributes together in one place the book provides a broad knowledge of polymer science and facilitates idea generation for researchers and students embarking on projects related to a specific field of polymer science Key features This book covers all possible terms associated with the field of polymers and related areas granting readers a comprehensive understanding of the entire spectrum of polymers The organization of the book follows an alphabetical format enabling quick and convenient access to specific terms Each polymer term is clearly defined with a figure or scheme as needed allowing readers to visualize the structures processes and applications involved This book is written for science students chemists polymer scientists

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