1. Record Nr. UNINA9910265350203321

Autore	Wong, Jo Yung
Titolo	Theory of ground vehicles / J. Y. Wong
Pubbl/distr/stampa	New York [etc.] : J. Wiley & Sons, c1978
ISBN	0471034703
Descrizione fisica	XXI, 330 p. : ill. ; 24 cm
Locazione	DINTR
Collocazione	D1/25
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910707277603321

Titolo	Managing the FDLP electronic collection : a policy and planning document
Pubbl/distr/stampa	Washington, DC : , : Library Programs Service, Superintendent of Documents, U.S. Government Printing Office, , [1998]
Descrizione fisica	1 online resource (24 pages)
Soggetti	Government publications - United States - Management Electronic publications - United States - Management Collection management (Libraries) - United States Digital libraries - United States - Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from title screen (viewed June 3, 2016). "October 1, 1998."

3. Record Nr. UNINA9911004747403321

Autore	Grot Walther
Titolo	Fluorinated ionomers / / Walther Grot
Pubbl/distr/stampa	Waltham, Mass., : Elsevier Inc., 2011
ISBN	1-283-19608-5 9786613196088 1-4377-4458-3
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (313 p.)
Collana	PDL handbook series
Disciplina	668.9
Soggetti	Ionomers Organofluorine compounds Electrolytic cells
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Fluorinated Ionomers; Copyright; Contents; Plastics Design Library; PDL Fluorocarbon Series Editor's Preface; Preface; Acknowledgements; Chapter 1 - Introduction; 1.1 Polymers; 1.2 Physical Shapes; References; Chapter 2 - History; References; Chapter 3 - Manufacture; 3.1 Introduction; 3.2 Perfluorinated Ionomers; 3.3 Polymerization; 3.4 Fabrication; 3.5 Hydrolysis and Acid Exchange; 3.6 Finishing and Testing; 3.7 Liquid Compositions; 3.8 Fluorinated Ionomers with Phosphonic or Sulfonyl Imide Functional Groups; 3.9 Partially Fluorinated Ionomers 3.10 Composite Materials of Ionomers and Inorganic Oxides3.11 Composite Materials of Ionomers and a Porous Matrix; 3.12 Remanufactured Membranes; References; Chapter 4 - Properties; 4.1 Properties of the Precursor Polymers; 4.2 Properties of the Ionic Forms; 4.3 Morphology; 4.4 Transport Properties; 4.5 Optical Properties; 4.6 Thermal Properties; 4.7 Stability; References; Chapter 5 - Applications; 5.1 Electrolysis; 5.2 Sensors and Actuators; 5.3 Dialysis; 5.4 Gas and Vapor Diffusion; 5.5 Protective Clothing; 5.6 Catalysis; References; Chapter 6 - Fuel Cells and Batteries; 6.1 Introduction 6.2 Operating Parameters6.3 Ionomer Stability; 6.4 Direct Methanol Fuel Cells (DMFCs); 6.5 Manufacture of MEAs; 6.6 Rechargeable Flow

Through Batteries; References; Further Reading; Chapter 7 - Commercial Membrane Types; 7.1 Unreinforced Perfluorinated Sulfonic Acid Films; 7.2 Reinforced Perfluorinated Membranes; References; Chapter 8 - Economic Aspects; 8.1 Chlor-Alkali Cells; 8.2 Fuel Cells; References; Chapter 9 - Experimental Methods; 9.1 Infrared Spectra; 9.2 Hydrolysis, Surface Hydrolysis, and Staining; 9.3 Other Reactions of the Precursor Polymer; 9.4 Ion Exchange Equilibrium
9.5 Determination of EW by Titration or InfraredAnalysis9.6 Determining Melt Flow; 9.7 Distinguishing the Precursor Polymer from Various Ionic Forms; 9.8 Fenton's Test for Oxidative Stability; 9.9 Examination of a Membrane; 9.10 Determining the Permselectivity; 9.11 Measuring Pervaporation Rates; 9.12 Simple Electrolytic Cells; References; Chapter 10 - 10 Heat Sealing and Repair; Reference; Chapter 11 -Handling, Storage, and Installation; 11.1 Handling the Film; 11.2 Pretreatment; 11.3 Installation; 11.4 Sealing and Gasketing; References; Chapter 12 - Toxicology, Safety, and Disposal
12.1 Toxicology12.2 Safety; 12.3 Disposal; References; Appendix A: A Chromic Acid Regeneration System; Appendix B: Laboratory Chlor-alkali Cell; Appendix C: Solution Cast Nafion Film; DuPontTM Nafion® PFSA Membranes NRE-211 and NRE-212 (Perfluorosulfonic Acid Polymer); Appendix D: Plastic-Based Bipolar Plates; Bipolar and Monopolar Plate Standard Propertiesof Entegris; DuPontTM Nafion® membranes: Membranes for Fuel Cells; XL-100 Membrane; Properties of Nafion® PFSA Membrane; Order and Packaging Information; Separating XL Membrane from the Coversheet and Backing Film; Product Labeling
Recommended Roll Storage Conditions

Sommario/riassunto

Fluorinated ionomer polymers form impermeable membranes that conduct electricity, properties that have been put to use in large-scale electrochemical applications, revolutionizing the chlor-alkali industry and transforming production methods of some of the world's highest-production commodity chemicals: chlorine, sodium hydroxide and potassium hydroxide. The use of fluorinated ionomers such as Nafion® have removed the need for mercury and asbestos in these processes and led to a massive reduction in electricity usage in these highly energy-intensive processes. Polymers in this group have al