

1. Record Nr.	UNINA9910813769903321
Autore	Muller Hartwig
Titolo	Medical gases : production, applications and safety // Hartwig Muller
Pubbl/distr/stampa	Weinheim, Germany : , : Wiley-VCH Verlag GmbH & Co. KGaA, , 2015 ©2015
ISBN	3-527-67603-1 3-527-67601-5 3-527-67604-X
Descrizione fisica	1 online resource (185 p.)
Disciplina	615.836
Soggetti	Oxygen therapy Gases - Therapeutic use
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	Cover; Title Page; Copyright; Contents; Preface; General Remarks; Chapter 1 Medicinal Gases - Manufacturing; 1.1 Where Do the Gases Come from?; 1.1.1 Gases Obtained from Air: Oxygen, Nitrogen, Argon, Xenon; 1.1.1.1 Oxygen; 1.1.1.2 Nitrogen; 1.1.1.3 Argon; 1.1.1.4 Xenon; 1.1.2 Gases Separated from Other Sources: Helium, Carbon Monoxide, Methane; 1.1.2.1 Helium; 1.1.2.2 Carbon Monoxide; 1.1.2.3 Methane; 1.1.3 Gases from Chemical Synthesis: Carbon Dioxide, Nitric Oxide, Nitrous Oxide; 1.1.3.1 Carbon Dioxide; 1.1.3.2 Nitric Oxide; 1.1.3.3 Nitrous Oxide; 1.1.4 Gas Mixtures for Inhalation 1.1.4.1 Reconstituted (Synthetic) Air1.1.4.2 Compressed Medical Air; 1.1.4.3 Nitrous Oxide 50 vol% in Oxygen; 1.1.4.4 Nitric Oxide Approximately 1000 ppm in Nitrogen; 1.1.4.5 Mixtures with the General Composition Carbon Monoxide, Helium in Synthetic Air (Carbon Monoxide Ranging between 0.2 and 0.3 vol%, Helium between 8 and 18 vol%); 1.1.4.6 Carbogen (5 vol% Carbon Dioxide in Oxygen); 1.1.5 Gas Mixtures for Reference - Calibration Gas Mixtures; Chapter 2 Pressure Vessels and Their Accessories; 2.1 Transportable Pressure Receptacles: Pressure Cylinders; 2.1.1 Seamless Steel Cylinders 2.1.2 Seamless Aluminum Cylinders2.1.2.1 Specifics of Aluminum Cylinders; 2.1.3 Welded Steel Vessels; 2.1.4 Lightweight Wrapped Steel

or Aluminum Cylinders; 2.1.5 Pharmaceutical View on Cylinders as Containment for Drugs; 2.1.5.1 European Pharmacopoeia View on Cylinders as Containment for Drugs; 2.1.5.2 Inner and Outer Surfaces of Cylinders; 2.1.6 Accessories for Cylinders: Valves; 2.1.6.1 Accessories for Valves: Gaskets; 2.1.6.2 Valves with Integrated Residual Pressure/Nonreturn Cartridge (NRV/PRV); 2.1.6.3 Integrated Valves

2.2 Non-transportable Pressure Receptacles: Stationary (Pressure) Tanks for Cryogenic Liquids

2.2.1 Safety Measures on Stationary Tanks; 2.2.2 European Pharmacopoeia View on Cryo-Tanks as Containment for Drugs; 2.2.3 Inner and Outer Surfaces of Cryo-Tanks; 2.2.4 Accessories for Cryo-Containers; 2.2.5 Choice of the Good Location for Tanks; 2.3 Medicinal Gas Pipeline Systems (MGPS); 2.3.1 Elements of a Medical Gas Pipeline System (MGPS); 2.3.1.1 Gas Terminal Units (Wall Sockets); 2.3.2 Tests and Checks before Going Onstream; 2.3.3 Operation of a Central Medical Supply System

2.3.4 Maintenance and Service, Pharmaceutical View

Chapter 3 Analytical Methods for Gases (as Described in Ph. Eur.); 3.1 Sampling; 3.1.1 Permanent Gases; 3.1.2 Gases Liquefied under Pressure; 3.1.3 Cryogenic Gases; 3.2 Gas Analytical Methods; 3.2.1 Infrared (IR-) Spectrometry; 3.2.1.1 Calibration; 3.2.2 Gas Chromatography (Lit); 3.2.2.1 Calibration; 3.2.3 Chemiluminescence; 3.2.3.1 Calibration; 3.2.4 Paramagnetic Measurement; 3.2.4.1 Calibration; 3.2.5 Moisture Measurement; 3.2.5.1 Calibration; 3.2.6 Fluorescence Analysis; 3.2.6.1 Calibration; 3.2.7 Test Tubes

Chapter 4 Monographs for Gases in the European and National Pharmacopoeias
