The Yaws Handbook Of Physical Properties For Hydrocarbons And Chemicals Second Edition Physical Properties For More Than 54000 Organic And C1 To C100 Organics And Ac To Zr Inorganics

Gone are the days when a lonely bottle of Angostura bitters held court behind the bar. A cocktail renaissance has swept across the country, inspiring in bartenders and their thirsty patrons a new fascination with the ingredients, techniques, and traditions that make the American cocktail so special. And few ingredients have as rich a history or serve as fundamental a role in our beverage heritage as bitters. Author and bitters enthusiast Brad Thomas Parsons traces the history of the world's most storied elixir, from its earliest "snake oil" days to its near evaporation after Prohibition to its ascension as a beloved (and at times obsessed-over) ingredient on the contemporary bar scene. Parsons writes from the front lines of the bitters boom, where he has access to the best and boldest new brands and flavors, the most innovative artisanal producers, and insider knowledge of the bitters-making process. Whether you're a professional looking to take your game to the next level or just a DIY-type interested in homemade potables, Bitters has a dozen recipes for customized blends--ranging from Apple to Coffee-Pecan to Root Beer bitters--as well as tips on sourcing ingredients and step-by-step instructions fit for amateur and seasoned food crafters alike. Also featured are more than seventy cocktail recipes that showcase bitters' diversity and versatility: classics like the Manhattan (if you ever get one without bitters, send it back), old-guard favorites like the Martinez, contemporary drinks from Parsons's own repertoire like the Shady Lane, plus one-of-a-kind libations from the country's most pioneering bartenders. Last but not least, there is a full chapter on cooking with bitters, with a dozen recipes for sweet and savory bitters-infused dishes. Part recipe book, part project guide, part barman's manifesto, Bitters is a celebration of good cocktails made well, and of the once-forgotten but blessedly rediscovered virtues of bitters.

Refineries and petrochemical engineers today are accepting more unconventional feedstocks such as heavy oil and shale, causing unique challenges on the processing side of the business. To create more reliable engineering design of process equipment for the petrochemical industry, petroleum engineers and process managers are forced to study the physical properties and compounds of these particular hydrocarbons. Instead of looking up each compound's information, The Yaws Handbook of Physical Properties for Hydrocarbons and Chemicals, Second Edition presents an easy-to-use format with rapid access to search for the particular compound and understand all the complex calculations in one tabular format. Understanding the composition of hydrocarbons is not easy to calculate quickly or accurately, but

this must-have reference leads the engineer to better estimated properties and fractions from easily measured components. Expanded to cover more total compounds and relevant functions, The Yaws Handbook of Physical Properties for Hydrocarbons and Chemicals, Second Edition remains a necessary reference tool for every petrochemical and petroleum engineers' library. Coverage added on elements for hydrocarbons and chemicals with more than 200 real-world cases included for practicality Increased compound coverage from 41,000 to 54,000 total compounds to quickly access for everyday use New functions added such as testing boiling point temperature and new data on density and refractory index

This series provides engineers with liquid and gas viscosities for the major organic compounds as a function of temperature. The graphs are arranged by chemical formula to provide ease of use; many of them cover the full range from melting point to boiling point to critical point. Common units are used, but each graph displays a conversion factor to provide English units.

This book provides comprehensive safety and health-related data for hydrocarbons and organic chemicals as well as selected data for inorganic chemicals.

The Platinum Edition presents the complete content of Perry's Chemical Engineer's Handbook, Seventh Edition, in both print and electronic formats packaged together and now available at one great price. The print Handbook is the world renowned source to chemical engineering practices--covering everything from the fundamentals to details on compuer applications and control, as well as the newest advances in your field. The accompanying CD, with its extensive graphics and fast problem-solving capabilities, is the perfect interactive complement to the text. This exclusive set is expressively designed for engineers with the highest standards--professionals who will settle for nothing less than the outstanding, superior-quality reference tools in this Platinum Edition. Two great reference tools--available at one great price! On the CD-ROM *The entire text of Perry's Chemical Handbook, Seventh Edition *75 interactive equations *On-screen problem-solving: math formulas, calculations, graphs, and tables *Automatic conversions from U.S. to metric (SI) standard units *Fully searchable Adobe Acrobat format *Hyperlinked Table of Contents and Index Minimum System Requirements PC with 486 or higher processor Microsoft Windows 3.1, Windows 95, or Windows NT 3.5.1 or later / 16 MB of RAM 25 MB of available hard-disk spaceSVGA monitor / 2x CD-ROM drive / Mouse

From the difficult to diagnose to the difficult to treat, Manson's Tropical Diseases prepares you to effectively handle whatever your patients may have contracted. Featuring an internationally recognized editorial team, global contributors, and expert authors, this revised and updated medical reference book provides you with the latest coverage on parasitic and infectious diseases from around the world. Incorporate the latest therapies into your practice, such as recently

approved drugs and new treatment options.Find what you need easily and apply it quickly with highlighted key information, convenient boxes and tables, extensive cross-referencing, and clinical management diagrams.Make the most accurate Tropical Disease diagnoses through a completely redesigned and modernized format, which includes full-color images throughout plus a wealth of additional illustrations online at Expert Consult.Apply the latest treatment strategies for HIV/AIDS, tropical neurology, malaria, and much more. Put the latest international expertise to work for you and your patients with new chapters covering Global Health; Global Health Governance and Tropical Diseases; Non-communicable Diseases; Obesity in the Tropics; and Emergency and Intensive Care Medicine in Resource-poor Settings.See which diseases are most prevalent in specific areas of the tropics through a new index of diseases by country, as well as online-only maps that provide additional detail.Better understand the variations in treatment approaches across the globe.

The Yaws Handbook of Physical Properties for Hydrocarbons and ChemicalsPhysical Properties for More Than 54,000 Organic and Inorganic Chemical Compounds, Coverage for C1 to C100 Organics and Ac to Zr InorganicsGulf Professional Publishing

Increased to include over 25,000 organic and inorganic compounds, The Yaws Handbook of Vapor Pressure: Antoine Coefficients, 2nd Edition delivers the most comprehensive and practical database source for today's petrochemical. Understanding antoine coefficients for vapor pressure leads to numerous critical engineering applications such as pure components in storage vessels, pressure relief valve design, flammability limits at the refinery, as well as environmental emissions from exposed liquids, making data to efficiently calculate these daily challenges a fundamental need. Written by the world’s leading authority on chemical and petrochemical data, The Yaws Handbook of Vapor Pressure simplifies the guesswork for the engineer and reinforces the credibility of the engineer’s calculations with a single trust-worthy source. This data book is a must-have for the engineer’s library bookshelf. Increase compound coverage from 8,200 to over 25,000 organic and inorganic compounds, including sulfur and hydrocarbons Solve process design questions quickly from a single reliable data source Locate answers easily for multiple petrochemical related questions such as bubble point, dew point temperatures, and vapor-liquid equilibrium

Transport and transformation processes are key for determining how humans and other organisms are exposed to chemicals. These processes are largely controlled by the chemicals’ physical-chemical properties. This new edition of the Handbook of Physical-Chemical Properties and Environmental Fate for Organic Chemicals is a comprehensive series in four volumes that serves as a reference source for environmentally relevant physical-chemical property data of numerous groups of chemical substances. The handbook contains physical-chemical property data from peer-reviewed journals and other valuable sources on over 1200 chemicals of environmental concern. The handbook contains new data on the temperature dependence of selected physical-chemical properties, which allows scientists and engineers to perform better chemical assessments for climatic conditions outside the 20–25-degree range for which property values are generally reported. This second edition of the Handbook of Physical-Chemical Properties and Environmental Fate for Organic Chemicals is an

essential reference for university libraries, regulatory agencies, consultants, and industry professionals, particularly those concerned with chemical synthesis, emissions, fate, persistence, long-range transport, bioaccumulation, exposure, and biological effects of chemicals in the environment. This resource is also available on CD-ROM

Must-have reference for processes involving liquids, gases, and mixtures Reap the time-saving, mistake-avoiding benefits enjoyed by thousands of chemical and process design engineers, research scientists, and educators. Properties of Gases and Liquids, Fifth Edition, is an all-inclusive, critical survey of the most reliable estimating methods in use today --now completely rewritten and reorganized by Bruce Poling, John Prausnitz, and John O'Connell to reflect every late-breaking development. You get on-the-spot information for estimating both physical and thermodynamic properties in the absence of experimental data with this property data bank of 600+ compound constants. Bridge the gap between theory and practice with this trusted, irreplaceable, and expert-authored expert guide -- the only book that includes a critical analysis of existing methods as well as hands-on practical recommendations. Areas covered include pure component constants; thermodynamic properties of ideal gases, pure components and mixtures; pressure-volume-temperature relationships; vapor pressures and enthalpies of vaporization of pure fluids; fluid phase equilibria in multicomponent systems; viscosity; thermal conductivity; diffusion coefficients; and surface tension.

Written by one of the most prolific and well-respected chemical engineers in the industry, this is the most comprehensive and thorough volume ever written on the thermodynamic properties of hydrocarbons and chemicals. This volume covers the spectrum, including chapters on the heat capacity and entropy of gas, solids and liquids, the entropy of formation, and many other topics. The design of heat exchangers and other equipment for heating or cooling substances to temperatures necessary in process applications requires knowledge of heat capacity, covered in the first portion of the book. The heat effects of chemical reactions are ascertained from enthalpy of formation. Other chapters cover the Helmholtz energy of formation and internal energy of formation, which is useful in modeling and ascertaining the energy of explosions. This coverage greatly exceeds the coverage of any other book and makes The Yaws Handbook of Thermodynamic Properties of Hydrocarbons and Chemicals a must-have for anyone working in the fields of chemical engineering, process engineering, refining and chemistry.

A comprehensive and example oriented text for the study of chemical process design and simulation Chemical Process Design and Simulation is an accessible guide that offers information on the most important principles of chemical engineering design and includes illustrative examples of their application that uses simulation software. A comprehensive and practical resource, the text uses both Aspen Plus and Aspen Hysys simulation software. The author describes the basic methodologies for computer aided design and offers a description of the basic steps of process simulation in Aspen Plus and Aspen Hysys. The text reviews the design and simulation of individual simple unit operations that includes a mathematical model of each unit operation such as reactors, separators, and heat exchangers. The author also explores the design of new plants and simulation of existing plants where conventional chemicals and material mixtures with measurable compositions are used. In addition, to aid in comprehension, solutions to examples of real problems are included. The final section covers plant design and simulation of processes using nonconventional components. This important resource: Includes information on the application of both the Aspen Plus and Aspen Hysys software that enables a comparison of the two software systems Combines the basic theoretical principles of chemical process and design with real-world examples Covers both processes with conventional organic chemicals and processes with more complex materials such as solids, oil blends, polymers and electrolytes Presents examples that are solved using a

new version of Aspen software, ASPEN One 9 Written for students and academics in the field of process design, Chemical Process Design and Simulation is a practical and accessible guide to the chemical process design and simulation using proven software.

This book covers all aspects of physical vapor deposition (PVD) process technology from the characterizing and preparing the substrate material, through deposition processing and film characterization, to post-deposition processing. The emphasis of the book is on the aspects of the process flow that are critical to economical deposition of films that can meet the required performance specifications. The book covers subjects seldom treated in the literature: substrate characterization, adhesion, cleaning and the processing. The book also covers the widely discussed subjects of vacuum technology and the fundamentals of individual deposition processes. However, the author uniquely relates these topics to the practical issues that arise in PVD processing, such as contamination control and film growth effects, which are also rarely discussed in the literature. In bringing these subjects together in one book, the reader can understand the interrelationship between various aspects of the film deposition processing and the resulting film properties. The author draws upon his long experience with developing PVD processes and troubleshooting the processes in the manufacturing environment, to provide useful hints for not only avoiding problems, but also for solving problems when they arise. He uses actual experiences, called ""war stories"", to emphasize certain points. Special formatting of the text allows a reader who is already knowledgeable in the subject to scan through a section and find discussions that are of particular interest. The author has tried to make the subject index as useful as possible so that the reader can rapidly go to sections of particular interest. Extensive references allow the reader to pursue subjects in greater detail if desired. The book is intended to be both an introduction for those who are new to the field and a valuable resource to those already in the field. The discussion of transferring technology between R&D and manufacturing provided in Appendix 1, will be of special interest to the manager or engineer responsible for moving a PVD product and process from R&D into production. Appendix 2 has an extensive listing of periodical publications and professional societies that relate to PVD processing. The extensive Glossary of Terms and Acronyms provided in Appendix 3 will be of particular use to students and to those not fully conversant with the terminology of PVD processing or with the English language.

A resource for individuals responsible for siting decisions, this guidelines book covers siting and layout of process plants, including both new and expanding facilities. This book provides comprehensive guidelines in selecting a site, recognizing and assessing long-term risks, and the optimal lay out of equipment facilities needed within a site. The information presented is applicable to US and international locations. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

The properties of 72 of the most commonly used solvents are given, tabulated in the most convenient way, making this book a joy for industrial chemists to use as a desk reference. The properties covered are those which answer the basic questions of: Will it do the job? Will it harm the user? Will it pollute the air? Is it easy to handle? Will it pollute the water? Can it be recovered or incinerated? These are all factors that need to be considered at the early stages of choosing a solvent for a new product or process. A collection of the physical properties of most commonly used solvents, their behaviour in the environment and their health and fire hazardsA collection of the physical properties of most commonly used solvents, their behaviour in the environment and their health and fire hazards

Petroleum and chemical engineers are constantly looking for reliable data yet don’t have the time to search through

multiple sources and articles to get the most accurate pieces of data. The Yaws Handbook of Thermodynamic Properties for Hydrocarbons and Chemicals, 2nd edition brings a one-stop database reference for engineers to quickly gain access on over 12,000 compounds, simple and complex fluids, and an extensive list of properties – all to validate and improve on their thermodynamic modeling. Enhanced with eight new chapters covering more equation of state parameters, Yaws' product continues to remain a go-to source to crosscheck critical properties available on process simulators or PVT software and estimate these properties based on the group contribution methods described in the different chapters. The Yaws Handbook of Thermodynamic Properties for Hydrocarbons and Chemicals, 2nd edition stands as the trusted database to optimize petrochemical processes, equipment, and operations. Provides a reliable database reference for thermodynamic properties, even varied by temperature, as well as simple and complex fluids, mixtures, and property calculations Updated with eight additional new chapters covering a modern platform of practical applications in modelling both pure fluids and mixtures with cubic equations of state Delivers accurate and quick options and solutions to size or simulate petrochemical processes and develop better predictive models

Textbook of Anaesthesia has become the book of choice for trainee anaesthetists beginning their career in the specialty. It is highly suitable for part 1 of the Fellowship of the Royal College of Anaesthetists and similar examinations. It is also a practical guide for all anaesthetists and other health care professionals involved in the perioperative period.

Covering the properties of over 8,200 compounds, this volume, written by the world's leading authority on chemical engineering, is more comprehensive and thorough than any other book of its kind. Antoine coefficients are one of the most important properties to industry processes, and Carl Yaws provides all the skills necessary for every chemical engineer, both academic and experienced. Understanding Antoine coefficients for vapor pressure extends to numerous other practical engineering processes, such as pure components in storage vessels, the concentration of species in vapor, relief valve design, as well as emissions into the environment from exposed liquids. The properties listed in The Yaws Handbook of Vapor Pressure: Antoine Coefficients are useful when calculating: Bubble point temperatures or pressures Dew point temperatures or pressures Vapor-liquid equilibrium And many other processes, for distillation columns, phase separators, and other mass transfer process equipment. Not available anywhere else, the information in this handbook is a valuable addition to any engineer's library.

The Go-To Reference for Chemists for More Than 70 Years – Completely Updated to Include Today's Essential Topics Lange's Handbook of Chemistry, Seventeenth Edition is written to provide a reliable one-stop source of factual information for today's working chemist. Within its pages, you will find an unmatched compilation of facts, data, tabular material, and experimental findings that span every area of chemistry. Included in this fully updated Seventeenth Edition

are listings of the properties of more than 4,000 organic and 1,400 inorganic compounds. The Seventeenth Edition is enhanced by the addition of an all-new section on Naturally Occurring Chemicals and Chemical Sources. This timely new content includes descriptions of coal, crude oil, natural gas, tar sand and tar sand bitumen, oil shale, biomass and biofuels, and minerals. Sections include: • Inorganic Chemistry • Organic Chemistry • Naturally Occurring Chemicals and Chemical Sources • Spectroscopy (available online at www.mhprofessional.com/Langes) • General Information and Conversion Tables (available online at www.mhprofessional.com/Langes) If you prefer the convenience of one authoritative resource, rather than a multitude of scattered and diverse references, Lange's Handbook of Chemistry, Seventeenth Edition belongs on your desk.

Understanding the energy it takes to build or break chemical bonds is essential for scientists and engineers in a wide range of innovative fields, including catalysis, nanomaterials, bioengineering, environmental chemistry, and space science. Reflecting the frequent additions and updates of bond dissociation energy (BDE) data throughout the literat

The Handbook of Thin Film Deposition Techniques: Principles, Methods, Equipment and Applications, Second Edition explores the technology behind the spectacular growth in the silicon semiconductor industry and the continued trend in miniaturization over the last 20 years. This growth has been fueled in large part by improved thin film deposition techniques and the development of highly specialized equipment to enable this deposition. This second edition explains the growth of sophisticated, automatic tools capable of measuring thickness and spacing of submicron dimensions. The book covers PVD, laser and E-beam assisted deposition, MBE, and ion beam methods to bring together all of the physical vapor deposition techniques. The book also includes coverage of chemical mechanical polishing that helps attain the flatness that is required by modern lithography methods and new materials used for interconnect dielectric materials, specifically organic polyimide materials.

A vital resource for pilots, instructors, and students, from the most trusted source of aeronautic information.

This book is a printed edition of the Special Issue Skin-Related Neglected Tropical Diseases (Skin-NTDs)—A New Challenge that was published in TropicalMed

An up-to-date, exhaustive reference of all solids capable of changing the physical and chemical properties of materials. This one volume presents the information needed to market, develop, select, manufacture and apply these versatile new grades of fillers. Contains all the fundamentals and latest advances in fillers technology and the products in which they are used.

A standard reference for engineers in the refining and chemical industries, this series (now expanded to three volumes) compiles the essential physical property data needed to design and operate oil refineries, petrochemical plants, and gas

processing facilities. The expanded 3rd edition of Volume 2 (2nd edition, 1984) has complete information on o.

"Written by the most lauded and respected author on chemical compounds in the field of chemical engineering, this volume is simply the most comprehensive collection of data on chemical compounds evere compiled. A compendium of over 41,000 organic and inorganic chemicals, this broad, ambitious and invaluable work covers c1to c100 organics and Ac to Zr inorganics, with useful applications for the following audiences: Chemists Chemical engineers Chemistry students Chemical engineering students Process engineers For use in the field, in the lab or in the classroom there is no other work that comes close to the research compiled in this handy reference. Collected in one volume, the data on these 41,000 compounds is the most useful in the industry for the engineer and the chemist alike."--Publisher's website.

Compiled by an expert in the field, the book provides an engineer with data they can trust. Spanning gases, liquids, and solids, all critical properties (including viscosity, thermal conductivity, and diffusion coefficient) are covered. From C1 to C100 organics and Ac to Zr inorganics, the data in this handbook is a perfect quick reference for field, lab or classroom usage. By collecting a large – but relevant – amount of information in one source, the handbook enables engineers to spend more time developing new designs and processes, and less time collecting vital properties data. This is not a theoretical treatise, but an aid to the practicing engineer in the field, on day-to-day operations and long range projects. Simplifies research and significantly reduces the amount of time spent collecting properties data Compiled by an expert in the field, the book provides an engineer with data they can trust in design, research, development and manufacturing A single, easy reference for critical temperature dependent properties for a wide range of hydrocarbons, including C1 to ClOO organics and Ac to Zr inorganics

Written by more than 40 world renowned authorities in the field, this reference presents information on plant design, significant chemical reactions, and processing operations in industrial use - offering shortcut calculation methods wherever possible.

Physical and thermodynamic property data for hydrocarbon and organic compounds are of special value to engineers in the chemical processing and petroleum refining industries. This book offers engineers and scientists quick access to this data by the use of tabular information.

Wind energy’s bestselling textbook- fully revised. This must-have second edition includes up-to-date data, diagrams, illustrations and thorough new material on: the fundamentals of wind turbine aerodynamics; wind turbine testing and modelling; wind turbine design standards; offshore wind energy; special purpose applications, such as energy storage and fuel production. Fifty additional homework problems and a new appendix on data processing make this comprehensive edition perfect for engineering students. This book offers a complete examination of one of the most promising sources of renewable energy and is a great introduction to

this cross-disciplinary field for practising engineers. “provides a wealth of information and is an excellent reference book for people interested in the subject of wind energy.” (IEEE Power & Energy Magazine, November/December 2003) “deserves a place in the library of every university and college where renewable energy is taught.” (The International Journal of Electrical Engineering Education, Vol.41, No.2 April 2004) “a very comprehensive and well-organized treatment of the current status of wind power.” (Choice, Vol. 40, No. 4, December 2002)

This book—prepared by the Federal Aviation Administration—is a resource without equal for glider pilots. Covering components and systems, flight instruments, performance limitations, preflight and ground operations, launch and recovery procedures, flight maneuvers, traffic patterns, soaring weather, radio navigation, and much more, it lays out in authoritative detail the science, mechanics, and regulations that every pilot needs to know. Plus, it contains a glossary of essential terms and crystal-clear color illustrations. No one should learn to fly, or fly a glider, without this information close at hand.

Thermodynamic property data are important in many engineering applications in the chemical processing and petroleum refining industries. The "Handbook of Thermodynamic Diagrams" series presents volume and enthalpy diagrams (graphs) for the major organic chemicals and hydrocarbons, as well as the major inorganic compounds and elements. The graphs, arranged by carbon number and chemical formula, cover a wide range of pressures and temperatures to enable engineers to determine quickly values at various points. This volume covers inorganic compounds and elements.

Part I: Process design -- Introduction to design -- Process flowsheet development -- Utilities and energy efficient design -- Process simulation -- Instrumentation and process control -- Materials of construction -- Capital cost estimating -- Estimating revenues and production costs -- Economic evaluation of projects -- Safety and loss prevention -- General site considerations -- Optimization in design -- Part II: Plant design -- Equipment selection, specification and design -- Design of pressure vessels -- Design of reactors and mixers -- Separation of fluids -- Separation columns (distillation, absorption and extraction) -- Specification and design of solids-handling equipment -- Heat transfer equipment -- Transport and storage of fluids.

The ultimate book for learning stick and rudder flying skills for beginners and experienced pilots.