Record Nr.	UNINA9910861012803321
Autore	Yates W. David
Titolo	Safety professional's reference and study guide, third edition / / authored by W. David Yates
Pubbl/distr/stampa	Boca Raton : , : CRC Press, , 2020
ISBN	1-000-02978-6 1-000-02976-X 0-429-29305-4
Edizione	[Third edition.]
Descrizione fisica	1 online resource (923 pages)
Disciplina	363.11076 363.1
Soggetti	Industrial safety - Examinations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover Half Title Title Page Copyright Page Dedication Table of Contents Preface Author 1. The Safety Profession and Preparing for the ASP/CSP Exam Board of Certified Safety Professionals Definitions Minimum Qualifications to Sit for the ASP Examination Academic Requirements Professional Safety Experience Minimum Qualifications to Sit for the CSP Examination Academic Requirements Professional Safety Experience Requirements ASP/CSP Process Examination Blueprint Associate Safety Professional Examination Blueprint Domain #1- Mathematics (18%) Domain #2-Safety Management Systems (23%) Domain #3-Ergonomics (13%) Domain #4-Fire Prevention and Protection (11%) Domain #5-Occupational Health (11%) Domain #6-Environmental Management (15%) Domain #7-Training, Education, and Communication (9%) Certified Safety Professional (CSP) Examination Blueprint Domain #1-Advanced Sciences and Math (9.95%) Domain #2-Management Systems (13.34%) Domain #3-Risk Management (14.49%) Domain #4-Advanced Application of Key Safety Concepts (14.69%) Domain #5-Emergency Preparedness, Fire Prevention, and Security (10.59%) Domain #6-Occupational Health and Ergonomics (12.05%) Domain #7-Environmental Management Systems (7.38%) Domain #8-Training and Education

1.

(10.18%) -- Domain #9-Law and Ethics (7.33%) -- Preparing for the ASP/CSP Examinations -- Knowing Your Strengths and Weaknesses --Developing an Examination Preparation Plan -- References and Resources -- Test-Taking Strategy -- 2. Regulations -- Occupational Safety and Health Act -- Who Is Covered under the Occupational Safety and Health Act? -- Horizontal and Vertical Standards -- General Duty Clause -- Employer Rights and Responsibilities -- Employee Rights and Responsibilities -- Communications and Correspondence with OSHA. OSHA Inspections and Process -- OSHA Citations -- OSHA Citation Penalties -- Adjustment of Penalties for Good Faith -- Appeals --Employee Appeals -- Employer Appeals -- Petition for Modification of Abatement -- Notice of Contest -- Review Procedure -- Hazard Communication Standard (29 CFR 1910.1200) -- Purpose -- Scope and Application -- Written Hazard Communication Standard -- Label and Other Forms of Warning -- Safety Data Sheets -- Employee Information and Training -- Training -- Blood-Borne Pathogens Standard (29 CFR 1910.1030) -- Scope, Application, and Definitions -- Exposure Control Plan -- Hepatitis B Vaccination and Postexposure Follow-Up --Communication of Hazards -- Record Keeping -- Control of Hazardous Energy Standard (29 CFR 1910.147) -- Scope, Application, and Purpose -- Definitions -- Energy Control Program -- Periodic Inspection --Training and Communication -- Confined Space Entry Standard (29 CFR 1910.146) -- Scope and Application -- Definitions -- General Requirements -- Confined Space Entry Program -- Entry Permits --Training -- Personal Protective Equipment (29 CFR 1910.132) --Application -- Employee-Owned Equipment -- Hazard Assessment and Equipment Selection -- Training -- Respiratory Protection Standard (29 CFR 1910.134) -- Purpose -- Definitions -- Respiratory Protection Program -- Training and Information -- Fall Protection Standard (29 CFR 1926.500-503) (Subpart M) -- Scope and Application --Definitions -- Duty to Have Fall Protection -- Training -- Record Keeping -- OSHA 300, 300-A, AND 301 FORMS (29 CFR 1904.29) --How Quickly Must Each Injury or Illness Be Recorded? -- Annual Summary -- Providing Records to Government Representatives --Reporting Serious Incidents or Fatalities (29 CFR 1904.39) --Determining Recordable Injuries or Illnesses -- Calculating Total Recordable Incident Rates (TRIR). Calculating Days Away, Restricted, or Transfer Rates -- Calculating Severity Rates -- Key Information to Remember on Regulations --Comparison of Hazard Communication Requirements -- OSHA Hazard Communication Standard 29 CFR 1910.1200 (HCS) and Globally Harmonized System (GHS) -- Introduction -- Comparison of Health Hazards -- General Comments -- Comparison of Physical Hazards --Comparison of OSHA HCS and GHS Criteria -- Comparison of Label Elements -- General Comments -- GHS and Transport Pictograms --General Comments -- Physical and Environmental Hazard Symbols --Label Examples -- Comparison of MSDS Elements -- General Comments -- 3. Math Review -- Order of Operations -- PEMDAS: "Please Excuse My Dear Aunt Sally" -- Correct Method Example --Incorrect Method Example -- Basic Rules of Positive and Negative Numbers -- Understanding Exponents -- Scientific Notation --Multiplication and Division Using Scientific Notation -- Engineering Notation -- Absolute Values -- Logarithms -- Formula or Equation Transpositions -- Factorials -- Euler's Number -- Common Geometric Equations -- Pythagorean Equation -- Basic Trigonometric Functions -- Sine -- Cosine -- Tangent -- Arcsine, Arccosine, and Arctangent --Quadratic Equation -- Calculator -- Summary -- 4. Particulates and Gases -- Periodic Table of the Elements -- Atomic Number -- Atomic

Mass -- Atoms -- Chemical Bonding -- Moles -- Molecules and Compounds -- Mixtures -- Chemical Formulas -- Atomic Weight of Compounds -- Percentage of Element in a Compound (by Weight) --Acids, Bases, and pH's -- Gas Laws -- Boyle's Law -- Charles' Law --Ideal Gas Law -- Conversion Factors for Converting Pressure Units to Atmospheric Pressure Units -- Conversion Factors for Converting Units of Volume to Liters -- Converting Grams to Moles -- Universal Gas Constant -- Combined Gas Law.

Concentrations of Vapors, Gases, and Particulates -- Standard Temperature and Pressure -- Standards and Regulations -- Time-Weighted Average -- Calculating PELs/TLVs for Periods Greater than 8 h -- Gaseous Mixtures -- Liquid Mixtures -- Percentage of TLV Mixture -- Converting mg/m[sup(3)] to ppm -- Converting ppm to mg/m[sup (3)] -- Lower Flammability Limit of Mixtures -- Referenced Equations -- Boyle's Law -- Charles' Law -- Ideal Gas Law -- Combined Gas Law -- Time-Weighted Average -- Calculating PELs/TLVs for Periods Greater than 8 h -- Gaseous Mixtures -- Liquid Mixtures -- Percentage of TLV for Mixtures -- Calculating PEL/TLV for Silica -- Converting mg/m[sup(3)] to ppm -- Converting ppm to mg/m[sup(3)] -- LFLs of Mixtures -- Key Information to Remember on Particulates and Gases --Reference -- 5. Toxicology -- Definitions -- Routes of Entry --Inhalation -- Ingestion -- Absorption -- Percutaneous and Intravenous Injections -- Dose-Response Relationship -- Exposures to Chemical Combinations -- Stages of Cancer -- Initiation -- Latency Period --Promotion -- Progression -- Types of Poisons -- Ames Testing --Cohort Study -- Advantages -- Disadvantages -- Case-Control Study -- Cross-Sectional Study -- Common Occupational Diseases and Disorders Caused by a Contributing Agent or Substance -- Asbestosis and Asbestos-Related Illnesses -- Brucellosis -- Benzene-Related Illnesses -- Byssinosis -- Arsenic-Related Illnesses -- Berylliosis and Beryllium-Related Illnesses -- Copper-Related Illnesses -- Cadmium-Related Illnesses -- Chromium-Related Illnesses -- Coal Dust-Related Illnesses -- Cobalt-Related Illnesses -- Acute Exposure -- Chronic Exposure -- Formaldehyde-Related Illnesses -- Lead-Related Illnesses -- Manganese-Related Illnesses -- Mercury-Related Illnesses --Pneumoconiosis -- Silica-Related Illnesses -- Zinc-Related Illnesses. Aluminum-Related Illnesses -- Antimony-Related Illnesses -- Dust-Related Illnesses -- Thallium-Related Illnesses -- Thallium-Related Illnesses -- Pesticide-Related Illnesses -- Key Information to Remember on Toxicology -- References -- 6. Industrial Hygiene Air Sampling -- Anticipation of Hazards -- Recognition of Hazards --Evaluation of Hazards -- Control of Hazards -- Definitions -- Air Sampling -- Sampling Methodology -- Equipment Selection -- Air Sampling Pumps -- Piston and Bellow Air Pumps -- Direct-Reading Instruments -- Cyclones -- Sampling Media -- Filters -- Sorbent Tubes -- Sample Collection Bags or Canisters -- Passive Samplers --Sampling Pump Calibration -- Determining Minimum and Maximum Sample Volumes -- Determining the Minimum Number of Samples to Collect -- The Sampling Process -- Industrial Hygiene Sampling and Record-Keeping Procedures -- Spiramid -- Medgate -- Process MAP --Key Information to Remember on Industrial Hygiene Air Sampling --References -- 7. Ventilation -- Purpose for Using Ventilation -- Types and Selection of Ventilation -- General Ventilation -- Dilution Ventilation -- Local (Exhaust) Ventilation -- General Concepts of Ventilation Notes -- Principles of Air Movement -- Calculating for Volumetric Air Flow -- Calculating Static Pressure, Velocity Pressure, and Total Pressure -- Calculating Velocity of Air -- Contaminant Generation -- Calculating Purge Rates -- Steady-State Concentration

	Calculating Rate of Generation for Liquid Solvents Calculating Vapor or Gaseous Concentrations Calculating Room Air Changes Calculating Concentration of a Contaminant with Dilution Ventilation Local Exhaust Ventilation Canopy Hood Down Draft Hood Enclosure Hood Receiving Hood Openings Calculating Hood Entry Losses Calculating Air flow Velocity. Calculating Capture Velocity for Plain Opening Hood.
Sommario/riassunto	"Safety Professional's Reference and Study Guide, Third Edition is written to serve as a useful reference tool for the experienced practicing safety professional, as well as a study guide for university students and those preparing for the Certified Safety Professional exam. It addresses major topics of the safety and health profession and includes the latest version of the BCSP reference sheet, a directory of resources and associations, as well as state and federal agency contact information. Additionally, this new edition offers new chapters as well as updated chapters and resources"