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Nota di contenuto	<p>Front Cover; Safety in the Process Industries; Copyright Page; Foreword; Preface; Errata; Table of Contents; Introduction; The process industries; Chemical hazards; Safety and technical competence; About this book; References; Part I: Setting the stage; Chapter 1. From past to present; 1.1 Origins of process hazards; 1.2 Toxic hazards of ancient metals2; 1.3 Changing attitudes to health and safety in chemical education; 1.4 Insurance losses in the US chemical industry; 1.5 Recent UK experience 1.6 Vapour cloud explosions (VCEs) and other major world losses in the hydrocarbon-chemical industries1.7 Health in the process industries; References; Chapter 2.Laws, codes and standards; 2.1 Present international trends; 2.2 The UK background; 2.3 The Health and Safety at Work etc. Act 1974 (HSWA); 2.4 Legislation on the Control of Major Hazards; 2.5 Other relevant legislation and its problems; 2.6 The law and public inquiries into major accidents; 2.7 The role of standards26; 2.8 Levels of standards; 2.9 Safety standards and codes of practice; References</p> <p>Chapter 3. Meanings and misconceptions3.1 Units and nomenclature; 3.2 Meanings of health and safety terms used; 3.3 Misconceptions and disasters; References; Chapter 4.Flixborough and its lessons; 4.1 Process description and normal start-up1,2; 4.2 Conditions during start-up on 1 June 19741,2; 4.3 Possible causes for the failure of the by-pass assembly; 4.4 The court's views on the immediate cause of the disaster; 4.5 The pressure rises and their cause; 4.6 What caused the earlier failure of R5?; 4.7 Organisational misconceptions; 4.8 Lessons to be learnt; References</p>

Chapter 5. Four other major accidents 5.1 The explosion at Shell's Pernis refinery in 19681; 5.2 The explosion at Dow Chemical Company's factory at King's Lynn, 27 June 1976; 5.3 The 'Dioxin' release at Seveso on 10 July 1976; 5.4 The Bhopal disaster in December 19844; References; Part II: Hazards - chemical, mechanical and physical; Chapter 6. Electrical and other physical hazards; 6.1 General electrical hazards; 6.2 Electrical ignition hazards; 6.3 Static electricity (including lightning); 6.4 Physical hazards involving liquids; References; Chapter 7. Health hazards of industrial substances 7.1 Occupational health professionals 7.2 How harmful substances attack us; 7.3 Effects on body organs; 7.4 Units and classes of toxicity; 7.5 Occupational Exposure Limits (OELs); 7.6 Sources of exposure to airborne substances hazardous to health; 7.7 Monitoring the working environment for toxic substances; 7.8 Substances hazardous to health, and the law; 7.9 Treatment of affected persons; 7.10 How does one decide if a disease is occupational?; References; Chapter 8. Chemical reaction hazards; 8.1 Reactivities of the elements and structural groupings; 8.2 Reaction rate 8.3 The power of reactions

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### Sommario/riassunto

Safety in the Process Industries aims to ensure the safety of people involved in process plants, especially those who face its immediate hazards and dangers. The book is divided into four parts. Part I covers topics such as the history of process hazards and attitudes in health and safety; laws concerned with the health and safety in the process industry; and the definitions of different terms related to health and safety. Part II discusses the electrical, chemical, and physical hazards in the process industries, as well as the dangers of flammability and corrosion. Part III talks about hazard

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