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### **Book review**

## **HAZARDOUS CHEMICALS Control and Regulation in the European Market**

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In many industries it is necessary to use a variety of chemical substances which might possess hazardous properties. Hence, knowledge of the intrinsic properties of chemical substances, and the resultant risks that might be encountered in the workplace, is an essential prerequisite, not only for avoiding occupational risks, but also for installing the correct safety measures and fulfilling all legal requirements.

The book *Hazardous Chemicals. Control and Regulation in the European Market* attempts to provide an overview of the responsibilities concerning the major chemical regulations and the directives of the European Union.

This book is structured on 8 chapters and a Subject Index. In the first chapter *Regulations of the European Union Concerning Chemicals* there are presented the European Institutions and the European Legislation. In the area chemicals there are much fewer Regulations than Directives. Important examples are the Regulation for existing chemicals 793/93/EC, the Regulation for import and export of dangerous chemicals 304/2003/EC, and the Biocide Product Regulation 1896/2000/EC.

In the chapter *Toxicological Basics* there are described the toxicological basics needed for understanding the most important properties of hazardous materials and associated regulations.

The next chapter *Classification of Substances and Preparations* contains a comprehensive description of the dangerous properties of chemical substances, and the classification of substances. First, there are presented the most important toxic, ecologic and physical-chemical properties of hazardous chemicals. Then, the classification of substances in conformity with legal classification and classification following the definition principle is presented. The

classification of substances in annex I of Directive 67/548/EEC is compulsory for all Member States in the European Community, because all regulations of the free market are based on Article 95 of the EC treaty; any national modification is not allowed. Substances not listed in Annex I have to be classified by the person who is responsible for placing them on the market, the producer, or the importer, on his or her own responsibility.

The chapter *Duties and Obligations when Placing Products on the Market* offers informations about labeling of dangerous substances and preparations, safety data sheets, and restrictions on marketing. Dangerous substances have to be labeled in accordance with Article 23 of Dangerous Substance Directive 67/548/EEC and dangerous preparations in accordance with Article 10 of Dangerous Preparation Directive 1999/45/EC. The intention of labeling is to inform the professional user of the most important hazards of substances and preparations and the main precautionary measures. Therefore, the label should express all potential hazards which could be relevant to normal handling and use of the substances or preparation. The safety data sheet should enable the professional user in particular to take the necessary measures concerning the protection of the environment and health and safety at the workplace. The safety data sheet must contain the information necessary for the protection of personnel and the environment.

In chapter 5 the notification of substances is discussed. All substances which are not listed in the European Inventory of Existing Commercial Substances have to be notified in accordance with the Substance Directive 67/548/EEC to the competent authority of the member state of the European Community in which the substance is manufactured,

or in which the importer has been established, 60 days before its first placing on the market.

In terms of occupational safety, the chapter *Occupational Safety and Health at the Workplace* (chapter 6) comprises a detailed description of the requirements and the wide range of possible safety measures available. Although the use of personal protective equipment does not play a primary role, its importance in everyday working life justifies a detailed description. Council Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work is a fundamental regulation in force. Up to now, 18 individual EC directives have been adopted on the basis of 89/391/EEC. This chapter presents some of the individual directives, which are dealing with hazardous chemicals.

Chapter 7, *Transportation of Dangerous Goods*, offers informations about the classification of dangerous goods dependant on their mode of transportation. In contrast with the legislation referring to the chemical substances, the one referring to the transportation of dangerous goods is more or less harmonized internationally. In the Section 7.3 the Global Harmonized System is presented.

The principal objective of the Global Harmonized System was originally to implement global classification and labeling systems for reasons of occupational safety and health, their placing on the market, and transportation.

In the final chapter of the book the REACH initiative of the EU Commission for a new chemical policy under the guidance of DG Environment is presented.

The book *Hazardous Chemicals. Control and Regulation in the European Market* by Herbert F. Bender and Philipp Eisenbarth offers an important information source for researchers and professionals working with hazardous chemicals concerning the classification, notification of substances, occupational safety and health at the workplace, and transport of dangerous goods.

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