Richard P. Pohanish and Stanley A. Greene: Wiley guide to chemical incompatibilities, 3rd edn

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The term “incompatibles” refers to a wide range of chemical reactions that produce undesirable results in uncontrolled situations—generation of toxic gases, fire, explosions, corrosion, polymerization, ruptured containers, creation of dangerous compounds, etc.

The first edition of this standard reference work appeared in 1997 as *Rapid Guide to Chemical Incompatibilities* (paperback, 886 pp.), and the second edition (hardbound, 1296 pp.) appeared in 2003 under the present title. This latest edition contains almost 9,000 alphabetically arranged, concise chemical incompatibility profiles, all rewritten and expanded, as well as nearly 250 new entries providing concise information on flammability, violent and explosive binary reactions, incompatibilities, and reactions that may result from physical change. More flashpoints; molecular formulas; lower and upper explosive limits; autoignition temperatures; information on the effects of chemicals coming into contact with construction materials, including metals, plastics, rubbers, and coatings; and NFPA®-type (Red) numerical fire codes have been added. Each profile contains suggested fire extinguishing media and dangerous thermal decomposition products that may be released in a fire. The glossary has been revised to help nonchemist users with general chemical terms, and many similar and contiguous chemical names and synonyms (with the same CAS number) have been combined into a single entry. Foreign language entries, trade names, and common (“trivial”) names of chemicals often used in the workplace or laboratory contain a reference to the main entry.

This authoritative, portable, easy-to-use reference on hazardous chemical interaction belongs on the shelf of all industrial and academic storerooms as well as of safety, first response, and plant management professionals responsible for the handling, storage, and conveyance of chemical materials. It will also provide chemists, technicians, and engineers with a resource to consult during experimental preparation and in the event of an emergency.

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