

Part II goes more deeply into the combustion disposal option. Not only are all aspects of burning tires discussed in a variety of modes as discussed above, but so are the effects of the fuel on emissions, emission control techniques, control efficiency and economics. Data on four industries currently using tires for fuel were given.

GARY F. BENNETT

Solvent Substitution for Pollution Prevention, U.S. Department of Energy and U.S. Air Force, Noyes Data Corp., Park Ridge, NJ, ISBN 0-8155-1319-4, 1992, 335 pp., \$48.

This book is the proceedings of a conference held by the U.S. Department of Energy and U.S. Air Force on the topic of "Alternative Technologies, Alternative Solvents, Recovery/Recycling of Low VOC Materials and Treatment for Environmentally Safe Disposal. The majority of these papers plus those received in an additional solicitation are published here: 43 papers in all make up this volume.

The papers are published in six major sections:

1. Alternative Technologies
2. Alternative Solvents
3. Solvent Recovery and Recycling
4. Dealing With Low VOCs
5. Treatment for Environmentally Safe Disposal of Solvents
6. Issues to Consider

The papers cover a wide range of topics including surface cleaning using lasers, CO₂ pellet blasting paint removal, fluxless solder, plasma stripping, supercritical CO₂ parts cleaning, biodegradable solutions, chlorine solvent alternatives, solvent database software, recycling, low VOC material, photocatalyst systems, hazardous waste incineration, chemical oxidation of organic wastes and health and environmental tradeoffs of alternative solvents.

GARY F. BENNETT

Chemical Safety Data Sheets Volume 5: Flammable Chemicals, by R. Allen (Ed.), The Royal Society of Chemistry, Cambridge, 1992, ISBN 0-85186-411-2, 300 pp., £54.95.

In past reviews of books containing information on chemicals, I have written: "In an emergency, one can never have too much information on the properties and hazards of the chemicals involved". Thus, I always eagerly scan such new books when I receive them. This series of bound, categorized safety

data sheets by the Royal Society of Chemistry is simply excellent and a must for any one seriously involved in hazardous material response.

This volume, the fifth in the Royal Society's sets out in a clear standardized form, information on 80 flammable chemicals. As noted, data are given on a wide variety of flammables including acetate, butane, diborane, ethyl mercaptan, methane, propane, sulfur, titanium and zinc.

For each chemical the following data (if available) are given:

- risk and safety precaution
- identifiers
- synonym
- chemical abstract number
- NIOSH number
- Hazchem code
- UN number
- threshold limit value
- USA threshold limits
- UK exposure limits
- German MAK value
- French limits
- Swedish limits
- physical properties
- packaging and transport
- manufacturer
- uses
- chemical hazards
- biological hazards
- carcinogenicity
- mutagenicity
- reproductive hazards
- first aid
- handling and storage
- disposal
- fire precautions

I fully agree with S.G. Luxon who writes in the preface:

"I believe this book provides a concise, systematic treatment of the subject that is clear and visually pleasing, and which will enable users to identify their overall responsibilities in respect to the listed chemicals."

The book ends with an index (including synonyms) of all these chemicals. A flash point index is also found.

My only hope is that when the series is finished, the Royal Society will publish a volume listing all the chemicals and synonyms telling in which informational volume the chemical is to be found. This source (or appropriate volume) is not obvious in that I would not ordinarily think to look for information on titanium in a book of flammable chemicals.

GARY F. BENNETT

Remediation Manual for Petroleum-Contaminated Sites, by D. L. Russell, Technomic Publishing, Lancaster, PA, 1992, ISBN 0-87762-876-9, 175 pp., \$49.

Of all the site contamination problems, the presence of petroleum products from spills, industrial discharges or leaking underground storage tanks is most common. Thus this manual, which is designed to assist with the cleanup of gasoline- and diesel-contaminated retail outlets and bulk terminals will be very useful to cleanup personnel.