

*Explosives Introduction to Reactive and Explosive Materials*, 25 min,  $\frac{1}{2}$  inch VCR, NUS Training Corp., 910 Clopper Road, Gaithersburg, MD 20877-1399, \$495 (inc. shipping and handling in U.S.)

In an attempt to make viewers more familiar with the power even small quantities of explosives and other materials possess, and the necessity for adequate precautions, this tape shows the blast and fire effects of small quantities, and the relationship to other materials which may be in the area. The difference between explosion and deflagration, detonation, shock wave and overpressure are demonstrated, and the terms often used in explosives such as SADT — self-accelerating decomposition, MSST — maximum safe storage temperature, and the classifications Explosive A, Explosive B1, Explosive C, Flammable liquid, pyrophoric liquid, oxidizer (solid and liquid), organic peroxides solids, flammable solids, pyrophoric solid, and flammable vs. non-flammable gases.

To obtain an independent evaluation, the tape was shown to a experienced hazardous materials section of a large fire department. The reaction was good, but more detail, especially in labeling and appearances were suggested for future editions. The narrator might display more direct concern, and should not stress that explosives can kill — this is hardly necessary. On a scale of 1 to 10, we would rate this edition as 7, and it should be shown where people with “real world” experience can comment.

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*Hazardous Chemicals Desk Reference*, 2nd edn., by R.J. Lewis, Sr., Van Nostrand Reinhold/Chapman and Hall, London, UK, 1991, ISBN 0-443-00497-4, 1579 pp., £55.50.

The first edition of this book is probably the most referred to item in my extensive reference collection of books on hazardous chemicals and their properties. Indeed, it is normally the first book I turn to, to acquire information on the properties of hazardous chemicals (data on 5500 chemicals are contained in the new edition). The new edition has more than 1000 new entries that were added because of the chemicals' toxicity, fire and explosion hazard or its importance to industry, but since 400 less important chemicals had to be omitted, the reader possessing the first edition may wish to retain it — I certainly will.

For each entry, the following data (if available) were provided:

- Entry number
- Hazard ranking (based on toxicity)
- Entry (chemical) name

- CAS number
  - DOT (IMCO) number
  - Molecular formula
  - Molecular weight
  - Description of the material and its physical properties
  - Synonyms
  - Consensus reports — whether listed as a cancer-causing compound; U.S. EPA extremely hazardous substance; community right-to-know list; genetic toxicology program; TSCA status
  - Standards and recommendations — OSHA air limits, ACGIH threshold limit values, DFG (Germany), MIAIC and NIOSH PEL
  - Safety profile — text summaries of the hazardous properties of the chemicals, especially cancer potential. For flammable, combustible, or reactive materials, the fire and explosion hazards are briefly summarized. Materials which are incompatible with the substance are listed and known fire-fighting methods and materials are discussed. Potential disaster hazards are noted also.
- In summary, a most valuable reference tool.

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