IR - HAZMAT (Hazardous Materials) - Bio-Rad Sadtler

Product Code - 438900
Spectra - 415

Description

This database contains 415 infrared spectra of hazardous compounds.

A hazardous chemical is defined by OSHA (Occupational Safety & Health Administration) as any chemical that is a health hazard or a physical hazard.

- OSHA defines a health hazard as a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. Chemicals covered by this definition include carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents that damage the lungs, skin, eyes, or mucous membranes.

- OSHA defines a physical hazard as a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive), or water-reactive.

- The broad definition OSHA uses to define hazardous chemicals includes not only generic chemicals but also paints, cleaning compounds, inks, dyes, and many other common substances.

Chemical manufacturers and importers are required to determine if the chemicals they produce or repackage meet the definition of a hazardous chemical. A chemical mixture may be considered as a whole or by its ingredients to determine its hazards. It may be considered as a whole if it has been tested as a whole and an MSDS (Materials Safety Datasheet) has been issued accordingly. Otherwise the mixture must be evaluated by its components. If the mixture contains 1.0 percent or more of a hazardous chemical or 0.1 percent of an ingredient listed as a carcinogen or suspected carcinogen, the whole mixture is assumed to have the same health and/or carcinogenic hazards as its components.

This collection can be used in the identification, classification, and ultimately the control of these materials.

Additional Information

Each compound in this database is identified by its chemical name and the method of analysis as well as structural formula, molecular formula, and molecular weight. Synonyms, melting point, boiling point, literature references, and comments are also displayed when available.

This data has been subject to the Sadtler Data Review Protocol™ to provide researchers the highest standard in spectral data today. These rigorous qualifying procedures start at data acquisition and continue throughout the database development process.