

IR - Sadtler Solvents (Basic) - Wiley

Spectra - 635

Description

This database contains the FT-IR reference spectra of 635 common solvents to aid in the identification and analysis of these solvents. It also provides supporting chemical and physical information commonly required for these chemicals.

Additional Information

Each compound is listed by its Chemical Abstracts name or its most readily recognizable name, together with frequently-used synonyms. The molecular formula, the molecular weight, melting point, boiling point, and flash point are all given when the information is available. Two numerical designations are given for each compound when available; these being the Chemical Abstracts Service Number (CAS) and the NIOSH number listed in the Registry of Toxic Effects of Chemical Substances by the National Institute for Occupational Safety and Health. Density and refractive index values are given at two different temperatures whenever possible. Values for the dielectric constant and vapor pressure are at 25°C unless specified otherwise, and the vapor pressures are given in torr. Additional information regarding use, solubility, flammability, and toxicity is also provided for most compounds. Each spectrum is also clearly labeled with the source of sample and the sample preparation technique used.

Classifications

Hydrocarbons - 82
Hydroxyl Compounds - 65
Ethers - 35
Carbonyl Compounds - 152
Halogenated Compounds - 131
Nitrogen Compounds - 113
Sulfur Compounds - 19
Deuterated Compounds - 11
Water - 1
More than one type of characteristic atom or functional group - 38

Below is a specific breakdown of compounds in the database:

Acetals - 4
Acid Alcohols - 1
Acid Anhydrides - 6
Aldehyde Ethers - 1
Aldehydes - 13
Alicyclic Ethers - 9
Aliphatic Acids - 11
Aliphatic Ethers - 15
Aliphatic Iodinated Hydrocarbons - 10
Aliphatic Ketones - 15
Aliphatic Monobrominated Hydrocarbons - 12
Aliphatic Monochlorinated Hydrocarbons - 10
Aliphatic Nitriles - 9

Aliphatic Polybrominated Hydrocarbons - 3
Aliphatic Polychlorinated Hydrocarbons - 13
Amides - 11
Amino Alcohols - 5
Amino Ethers - 12
Aromatic Brominated Hydrocarbons - 7
Aromatic Chlorinated Hydrocarbons - 5
Aromatic Ethers - 6
Aromatic Fluorinated Hydrocarbons - 5
Aromatic Hydrocarbons - 21
Aromatic Polychlorinated Hydrocarbons - 3
Carbonyl Alcohols - 1
Chloro Alcohols - 4
Chloro Amines - 3
Chloro Ethers - 7
Cyano Alcohols - 2
Deuterated Compounds - 11
Esters of Aliphatic Monocarboxylic Acids - 48
Esters of Aromatic Monocarboxylic Acids - 8
Esters of Chloro Acids - 5
Esters of Cyano Acids - 2
Esters of Dicarboxylic Acids - 20
Esters of Hydroxy Acids - 6
Esters of Keto Acids - 6
Esters of Polybasic Acids - 4
Esters of Unsaturated Monocarboxylic Acids - 6
Ether Alcohols - 18
Ether Esters - 5

Halogenated Acids - 3
Halogenated Compounds - 35
Lactones - 2
Monohydroxyl Aliphatic Alcohols - 41
Monohydroxyl Aromatic Alcohols - 9
Monohydroxyl Unsaturated Alcohols - 7
Nitro Compounds - 8
Nitro Ethers - 1
Other Ketones - 15
Other Nitriles - 8
Other Nitrogen Compounds - 7
Other Primary Amines - 2
Other Sulfur Compounds - 9
Polyhydroxyl Alcohols - 8
Primary Aliphatic Amines - 9
Primary Aromatic Amines - 11
Saturated Aliphatic Hydrocarbons - 39
Secondary Amines - 13
Sulfides - 6
Tertiary Amines - 13
Thioether Alcohols - 1
Thiols - 3
Unsaturated Acids - 4
Unsaturated Chlorinated Hydrocarbons - 6
Unsaturated Ethers - 1
Unsaturated Hydrocarbons - 22
Water - 1

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