

IR - Organosilicons

Product Code - This database is available only as part of KnowItAll IR Spectra - 520

Description

This FT-IR database of 520 organosilicons provides a reference in the identification and analysis of silanes and silicone compounds.

Organosilicon compounds offer a unique combination of properties to suit a wide variety of industries and are important in both commercial and research applications. These compounds are the building blocks in the manufacture of products such as adhesives, additives, flame retardants, lubricants and sealants.

Bio-Rad has produced this database in collaboration with United Chemical Technologies, Inc. (www.unitedchem.com), a major supplier of silane and silicone polymer compounds.

Additional Information Listed

Each compound is listed by its most readily recognizable name. CAS number, molecular formula, the molecular weight, melting point, boiling point, and flash point are all given when the information is available. Purity, density, viscosity, and refractive index values are also given whenever possible. Comments are included to provide additional information on the chemical.

Each spectrum is clearly labeled with the source of sample, United Chemical Technologies, Inc., the catalog number, and the sample preparation technique used. The spectra are presented over a spectral region 3700 to 600 cm^{-1} .

Classifications

The compounds in the database represent the following chemical classes. Chemical classification for the compounds is based on Si linkage. More than one chemical class is listed for certain compounds where appropriate.

Hydrosilane - 49	Siloxane - 156	Cyano containing Silane - 12
Alkylsilane - 281	Silanol - 8	Heterocyclic Silane - 7
Acylsilane - 16	Silsesquioxane - 2	Chlorosilane - 135
Alicyclic Silane - 25	Alcohol/Phenol - 7	Chlorine containing Silane - 19
Aromatic Silane - 79	Carboxylic Acid - 2	Fluorosilane - 4
Silane containing Double Bonds - 14	Ester - 22	Fluorine containing Silane - 14
Silane containing Triple Bonds - 6	Ether - 16	Bromine containing Silane - 10
Vinyl containing Silane - 84	Oxide/Peroxide - 6	Iodine containing Silane - 3
Silacrown - 1	Epoxy containing Silane - 6	Phosphorous containing Silane - 3
Oxygen containing Silane - 2	Methacrylic/Acrylic Silane - 20	Sulfur containing Silane - 10
Alkoxy silane - 148	Nitrogen containing Silane - 97	Organometallic - 3
Acyloxy silane - 16	Silazane - 10	Silicone Polymer - 93
Acetoxy silane - 16	Amide containing Silane - 5	