

FDM Raman Organics (1450 Spectra)

The spectral range is 200 cm⁻¹ to 3417 cm⁻¹ and the optical resolution is about 4.3 cm⁻¹ at 1000 cm⁻¹. These spectra were run on a benchtop dispersive system with a 780 nm laser with an output of 300 mW and up to 150 mW at the sample, a fixed grating triple pass monochromator, autoexposure and white light intensity correction. ASTM compliant system tests for resolution and x-axis calibration were performed daily.

The samples are the same as those used in the FDM ATR Organics Diamond and FDM ATR Organics Germanium.

This library covers a wide range of simple model compounds and increasingly complex compounds.

Considerable effort was put into the selection of compounds for the biofuels community including methyl, ethyl and butyl fatty acid esters, fats, fatty acids, alcohols, aldehydes, alkanes, alkenes, alkynes, carboxylic acids, dicarboxylic acids, ethers, glycols, and ketones.

Approximately 150 flavor and fragrance compounds were included. Many of these (alcohols, ketones) complement the model compounds and biofuel compounds. Other compounds include a variety of biochemicals, peptides, intermediates and small aromatics.

Contains:

Fatty Acid Methyl Esters, saturated	Glycols & Glycol Ethers
Fatty Acid Methyl Esters, unsaturated	Dicarboxylic Acids
Fatty Acid Ethyl Esters	150 Flavor & Fragrance compounds
Fatty Acid Butyl Esters	Alkylbenzenes & Chlorobenzenes
Fatty Acids	Phenols & Chlorophenols
Fats	Phthalate Esters
Alcohols C1 to C22	Amines
Aldehydes	Amino Acids
Normal and Branched Alkanes, C6 to C40	Aromatics C6 to C16
Alkenes, C6 to C22	Naphthenes
Normal, Methyl and Branched Ketones	and much, much more

Samples from the chemical name index (name, CAS number):

3-Methyl-2-butanone, 563-80-4
3-Methyl-3-pentanol, 77-74-7
3-Methylcyclohexanone, 591-24-2
3-Methylheptane, 589-81-1
3-Methylhexane, 589-34-4
3-Octanone, 106-68-3
3-Pentanol, 584-02-1
3-Pentanone, 96-22-0
4-Aminobenzoic Acid, 150-13-0
4-Aminobenzophenone, 1137-41-3
4-Aminosalicylic acid, 65-49-6
4-Biphenylcarboxaldehyde, 3218-36-8