

FDM ATR Inorganics Diamond (498 Spectra)
FDM ATR Inorganics Germanium (586 Spectra)

The spectra run on a single bounce monolithic Diamond ATR crystal have a spectral range of 400 cm⁻¹ to 4000 cm⁻¹. The spectra run on a single bounce monolithic Germanium ATR crystal have a spectral range of 600 cm⁻¹ to 4000 cm⁻¹. The optical resolution is 2 cm⁻¹.

The Diamond ATR spectra were run on an ATR accessory with a 45 degree angle of incidence. Approximately 130 Germanium ATR spectra, of oxides and oxide anions, were run on an ATR accessory with a 45 degree angle of incidence and the remainder were run on an ATR accessory with a 43 degree angle of incidence.

These spectra cover common and uncommon inorganics. A wide variety of metal salts (bromides, chlorides, fluorides, nitrates, oxides, oxide anions, phosphates and sulfates) are included making this database useful to a broad audience in commercial, government and academic labs. Spectra of both anhydrous and hydrated forms are presented for a number of compounds.

This database has excellent coverage of many oxides and oxide anions, rare earth and transition metal beta-diketonate organometallic complexes and alkoxide compounds and organoboron compounds.

Most names are provided with both the molecular formula and a CAS number. Thus, unfamiliar inorganic chemical names or regional naming differences won't limit the users ability to make good use of these excellent spectra. CAS numbers are extremely useful for locating synonyms and other chemical information on the web.

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

Europium sulfate octahydrate, Eu₂(SO₄)₃·8H₂O, 10031-55-7
Europium trifluoroacetylacetonate, 52093-64-1
Europium trifluoromethanesulfonate, 139177-64-3
Europium tris(thenoyltrifluoroacetate), 14054-87-6
Ferric ammonium citrate green, FeNH₄(SO₄)₂, 1185-57-5
Ferric ammonium sulfate dodecahydrate, FeNH₄SO₄·12H₂O, 7783-83-7
Ferric citrate trihydrate, FeC₆H₅O₇·3H₂O, 17217-76-4
Ferric nitrate nonahydrate, Fe(NO₃)₃·9H₂O, 7782-61-8
Ferric oxide red, Fe₂O₃, 1309-37-1
Ferric pyrophosphate, Fe₄(P₂O₇)₃, 10058-44-3
Ferrous ammonium sulfate hexahydrate, Fe(NH₄)₂(SO₄)₂·6H₂O, 7783-85-9
Ferrous sulfate heptahydrate, FeSO₄·7H₂O, 7782-63-0
Gadolinium 2-ethylhexanoate, GdC₂₄H₄₅O₆, 19189-19-6
Gadolinium acetate tetrahydrate, GdC₆H₉O₆·4H₂O, 15280-53-2
Gadolinium acetylacetonate, GdC₁₅H₂₁O₆, 14284-87-8
Gadolinium hexafluoroacetylacetonate, GdC₁₀H₂F₁₂O₄
Gadolinium nitrate, Gd(NO₃)₃, 10168-81-7
Gadolinium oxalate, Gd₂(C₂O₄)₃, 867-64-1