



FT-Raman Polymer Library

Library Listing – 99 spectra

This library provides a collection of common industrial polymer compounds run using the Raman analytical technique. It should be of interest to those in the polymer industry or those analysts who need quick analysis and identification of polymer packaging or contaminants.

The FT-Raman Forensic Library contains 99 spectra of polymers, copolymers, and additives. To create the library samples were placed in glass containers and excited with an Nd:YVO₄ laser (1064 nm) using laser powers between 100 mW, measured at the sample. A Thermo FT-Raman spectrometer (with a Ge detector) was used to collect the Raman spectra. The spectra were saved in Raman Shift format.

FT-Raman Polymer Library

<u>Index</u>	<u>Compound Name</u>	<u>Index</u>	<u>Compound Name</u>
39	1,2-Polybutadiene	59	Poly(Isobutyl Methacrylate)
1	Acrylonitrile/Butadiene/Styrene Resin	61	Poly(Methyl Methacrylate)
2	Alginic Acid, Sodium Salt (Algin)	65	Poly(Phenylene Sulfide)
3	Butyl Methacrylate/Isobutyl Methacrylate Copolymer	70	Poly(Tetrafluoroethylene)
4	Cellulose Acetate	29	Poly(Trimethyl Hexamethylene Terephthalamide)
5	Cellulose Acetate Butyrate	72	Poly(Vinyl Acetate)
6	Cellulose Propionate	74	Poly(Vinyl Alcohol) 98%
7	Cellulose Triacetate	73	Poly(Vinyl Alcohol) 99.7%
8	Ethyl Cellulose	75	Poly(Vinyl Butyral)
9	Ethylene/Acrylic Acid Copolymer	76	Poly(Vinyl Chloride)
10	Ethylene/Ethyl Acrylate Copolymer	77	Poly(Vinyl Chloride), Carboxylated
11	Ethylene/Propylene Copolymer	78	Poly(Vinyl Formal)
17	Ethylene/Vinyl Acetate Copolymer 60/40	80	Poly(Vinyl Stearate)
16	Ethylene/Vinyl Acetate Copolymer 67/33	81	Poly(Vinylidene Fluoride)
15	Ethylene/Vinyl Acetate Copolymer 72/28	63	Poly(alpha-Methylstyrene)
14	Ethylene/Vinyl Acetate Copolymer 75/25	41	Poly(n-Butyl Methacrylate)
13	Ethylene/Vinyl Acetate Copolymer 82/18	64	Poly(p-Phenylene Ether Sulphone)
12	Ethylene/Vinyl Acetate Copolymer 86/14	33	Polyacetal (Polytrioxane)
18	Hydroxy Butyl Methyl Cellulose	35	Polyacrylamide (Carboxyl Modified)
19	Hydroxypropyl Cellulose	36	Polyacrylamide (Carboxyl Modified)
20	Hydroxypropyl Methyl Cellulose	34	Polyacrylamide (non-ionic)
21	Methyl Cellulose	38	Polyamide Resin
22	Methyl Vinyl Ether/Maleic Acid Copolymer	42	Polycaprolactone
23	Methyl Vinyl Ether/Maleic Anhydride Copolymer	43	Polycarbonate
30	Nylon 11 (Polyundecanoamide)	49	Polyethylene
31	Nylon 12 (Polylauryllactam)	50	Polyethylene, Chlorinated 25%
24	Nylon 6 (Polycaprolactam)	51	Polyethylene, Chlorinated 36%
27	Nylon 6/10 [Poly(Hexamethylene Sebacamide)]	52	Polyethylene, Chlorinated 42%
28	Nylon 6/12 [Poly(Hexamethylene Dodecanediamide)]	53	Polyethylene, Chlorinated 48%
25	Nylon 6/6 [Poly(Hexamethylene Adipamide)]	54	Polyethylene, Chlorosulfonated
26	Nylon 6/9 [Poly(Hexamethylene Nonanediamide)]	56	Polyethylene, Oxidized
32	Phenoxy Resin	60	Polyisoprene, Chlorinated (Rubber)
40	Poly(1-Butene), Isotactic	67	Polypropylene, Isotactic
71	Poly(2,4,6-Tribromostyrene)	66	Polypropylene, Isotactic, Chlorinated
46	Poly(2,6-Dimethyl-p-Phenylene Oxide)	68	Polystyrene
58	Poly(2-Hydroxyethyl Methacrylate)	69	Polysulfone
47	Poly(4,4-Dipropoxy-2,2-Diphenyl Propane Fumarate)	79	Polyvinylpyrrolidone
62	Poly(4-Methyl-1-Pentene)	82	Styrene/Acrylonitrile Copolymer 75/25
37	Poly(Acrylic Acid)	83	Styrene/Acrylonitrile Copolymer, 68/32
44	Poly(Diallyl Isophthalate)	84	Styrene/Allyl Alcohol Copolymer
45	Poly(Diallyl Phthalate)	85	Styrene/Butadiene, ABA Block Copolymer
48	Poly(Ethyl Methacrylate)	86	Styrene/Butyl Methacrylate, 50/50 Copolymer
55	Poly(Ethylene Oxide)	87	Styrene/Ethylene-Butylene, ABA Block Copolymer
57	Poly(Ethylene Terephthalate)	88	Styrene/Isoprene, ABA Block Copolymer
		89	Styrene/Maleic Anhydride Copolymer 50/50
		90	Vinyl Alcohol/Vinyl Butyral Copolymer
		92	Vinyl Chloride/Vinyl Acetate Copolymer 88/12
		93	Vinyl Chloride/Vinyl Acetate Copolymer 90/10

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91	Vinyl Chloride/Vinyl Acetate Copolymer 90/10	97	Vinylidene Chloride/Vinyl Chloride Copolymer
94	Vinyl Chloride/Vinyl Acetate Copolymer, Carboxylated	99	Zein, Purified
95	Vinyl Chloride/Vinyl Acetate/Hydroxypropyl Acrylate Terpolymer	98	n-Vinylpyrrolidone/Vinyl Acetate 60/40 Copolymer
96	Vinylidene Chloride/Acrylonitrile Copolymer		