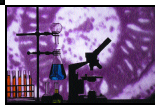


Flame Retardants



4204 Flame Retardants - 590 Spectra

The Flame Retardants database contains 590 infrared reference spectra of commercially available flame retardants. Flame retardants are chemicals used to modify the combustibility of the materials to which they are added.

Flame retardants are generally divided into two types. Non-reactive compounds, also referred to as additive flame retardants, are simply mixed into the material. Reactive flame retardants react chemically and become an integral part of the material with which they are mixed. Some of the most desirable characteristics resulting from the addition of flame retardants to certain materials include increased ignition temperatures and a reduction in burning rates, flame spread and smoke evolution.

Flame retardants may be inorganic or organic materials; often a combination of both is used. Each spectrum is presented with the trade name of the material, the chemical description and physical data supplied by the manufacturer, the source of the sample used in preparing the spectrum and the method of sample preparation used for the scan.

The following additional information will also be supplied when available: chemical composition, chemical and physical properties, source of sample and technique.

The following classes are included in the database:

Classifications:

Aliphatic Hydrocarbons	23	Polyethers	2	Polyamides	10
Polyethylenes	5	Epoxy Resins	31	Polyimides	1
Polypropylenes	3	Unmodified Epoxy Resins	4	Polysulfones	2
Petroleum Hydrocarbon Resins	12	Modified Epoxy Resins	27	Halogenated Hydrocarbons	19
Polybutadienes	2	Aliphatic Vinyl and Vinylidene Polymers	20	Compounds Containing Silicone	12
Aliphatic Hydrocarbon Copolymers	1	Vinyl Chloride Homopolymers	5	Ethers	1
Plasticizers	47	Vinyl chloride Copolymers	3	Oxides and Peroxides	80
Paraffins (Chlorinated)	43	Polyvinylidene Polymers (excluding nitriles)	7	Compounds Containing Halogen	100
Phosphoric Acids	2	Miscellaneous Vinyl Polymers	3	Compounds Containing Sulfur	10
Miscellaneous Plasticizers	2	Phenoplasts	3	Compounds Containing Phosphorus	77
Aromatic Hydrocarbons	6	Phenolic Resins	3	Anhydrides	7
Polystyrenes	6	Acrylic Copolymers	6	Esters	5
Chlorinated Hydrocarbons	4	Polyesters	21	Urea, Amide Cyanurates	3
Silicone Polymers	16	Polyesters	6	Organometallics	7
Polymers Containing Nitrile Linkage	28	Modified Polyesters	7	Metals	9
Acrylonitrile-butadiene-styrene Resins	13	Polycarbonates	6	Inorganic Salts	17
Polyurethane and Urethane Prepolymers	15	Alkyds	2	Miscellaneous Flame Retardant Materials	36



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