

## IR - Sadtler Flame Retardants - Wiley

Spectra - 595

### Description

This IR spectral database contains 595 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.

### Additional Information

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, and technique.

### Classifications

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

*This collection has been subject to the Sadtler Data Review Protocol™ to provide you with the highest standard in spectral data today. These rigorous qualifying procedures start at data acquisition and continue throughout the database development process.*