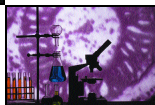


# Hummel | Sadtler Polymers



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## 4222 Hummel | Sadtler Polymers - 1,920 Spectra

Infrared-spectroscopic analysis of polymers will always assume an important position among physical methods of analyzing macromolecular systems. It allows for the identification of structural units in complex macromolecular systems as well as the vibrational analysis of highly ordered polymer systems.

Fundamental research has brought forth interesting new polymers and dozens of new polymeric compound groups have been developed and modified and combined in so many different ways that we are now able to name and describe thousands of chemically different polymers.

This database, which contains 1920 spectra, is a product of a cooperative effort between Professor Dieter Hummel of the University of Cologne and Bio-Rad Laboratories, Sadtler Division. It includes a wide range of polymers, copolymers and polymer additives. The database first appeared as a hard copy publication. Some spectra were run in our own laboratories from samples submitted by Professor Hummel while other spectra were submitted to us. Structures and physical properties are included. All data was reviewed by Professor Hummel and Sadtler's technical staff.

The following additional information will also be supplied when available: chemical description, physical description, source of sample, technique, comments, literature reference, classification, source of spectrum, method of synthesis, molecular formula, use, spectrometer and empirical formula. This database presents 82 classes of compounds classified as polymeric or monomeric compounds.

## CLASSIFICATIONS:

POLYETHYLENES	26	VINYL CHLORIDE HOMOPOLYMERS	20	POLYVINYLPIRROLIDONES	1
POLYPROPYLENES	28	PLASTICIZED POLYVINYL CHLORIDES	5	POLYVINYLPIRIDINES	12
PETROLEUM HYDROCARBON RESINS	14	VINYL CHLORIDE COPOLYMERS	34	POLYSULFONES	9
SYNTHETIC WAXES	8	POLYVINYL ALCOHOLS	2	SULFONATED POLYMERS	20
POLYBUTENES AND BUTYL RUBBERS	14	POLYVINYL ETHERS	1	MISCELLANEOUS POLYMERS	6
POLYBUTADIENES	40	POLYVINYL ACETALS	4	VEGETABLE OILS	55
SYNTHETIC POLYISOPRENES AND NATURAL RUBBERS	14	POLYVINYL ESTERS	16	ALIPHATIC UNSATURATED HYDROCARBONS	17
ALIPHATIC HYDROCARBON COPOLYMERS	8	POLYVINYL ACETATE COPOLYMERS	30	ALIPHATIC SATURATED HYDROCARBONS	14
COUMARONE-INDENE RESINS	2	POLYVINYLIDENE POLYMERS	23	AROMATIC HYDROCARBONS	10
OTHER CYCLIC HYDROCARBON RESINS	26	MISCELLANEOUS VINYL POLYMERS	47	HALOGENATED HYDROCARBONS	3
POLYSTYRENES	15	HYDROXYETHYL CELLULOSE	1	COMPOUNDS CONTAINING SILICON CYANATES, ISOCYANATES, NITRILES	27
STYRENE-BUTADIENE COPOLYMERS	1	CELLULOSE ETHERS	5	ETHERS	23
OTHER STYRENE COPOLYMERS	93	CARBOXYMETHYL CELLULOSE AND SALTS	1	OXIDES AND PEROXIDES	13
FLUOROCARBON RESINS	51	CELLULOSE ESTERS AND MIXED ESTERS	19	AMINES	1
CHLORINATED HYDROCARBON RESINS	41	MISCELLANEOUS CARBOHYDRATE DERIVATIVES	24	COMPOUNDS CONTAINING HALOGEN	15
SILICONE POLYMERS	61	PHENOLIC RESINS	24	COMPOUNDS CONTAINING SULFUR	9
ACRYLONITRILE-BUTADIENE-STYRENE RESINS	9	ACRYLIC COPOLYMERS	60	COMPOUNDS CONTAINING PHOSPHORUS	8
POLYURETHANE AND URETHANE PREPOLYMERS	88	POLYACRYLIC AND POLYMETHACRYLIC ESTERS	48	ALCOHOLS AND PHENOLS	5
BUTADIENE-ACRYLONITRILE COPOLYMERS	37	POLYACRYLIC AND POLYMETHACRYLIC ACIDS AND SALTS	77	ALDEHYDES, KETONES AND QUINONES	14
STYRENE-ACRYLONITRILE COPOLYMERS	8	POLYESTERS	11	CARBOXYLIC ACIDS	5
OTHER NITRILE POLYMERS	11	POLYCARBONATES	126	ANHYDRIDES	29
THIOPLASTS/POLYSULFIDES	29	ALKYDS	20	ACRYLATES AND METHACRYLATES	7
POLYETHERS	88	RESIN MODIFIED ALKYDS	39	PHTHALATES	29
ANHYDRIDE POLYMERS	15	NATURAL RESINS	21	MISCELLANEOUS ESTERS	6
UNMODIFIED EPOXY RESINS	10	ROSIN AND ROSIN DERIVATIVES	98	UREAS, AMIDES, CYANURATES	11
MODIFIED EPOXY RESINS	14	AMINOPLASTS/POLYAMINES	3	ORGANOMETALLICS	20
		POLYAMIDES	119	MISCELLANEOUS MONOMERIC COMPOUNDS	18
		POLYIMIDES	116		2
			49		



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