



Paper Materials Library

Library Listing – 306spectra

This library provides direct access to spectra of materials used in the production of paper products. The spectra were chosen to aid in the identification of impurities as well as to indicate the composition of completed paper products.

The Paper Materials Library includes 306 spectra of compounds and materials used in the production of paper products. The spectra were collected using a variety of techniques, including transmission and ATR. The spectra were collected by Sally Berben of Integrated Paper Services Inc., a recognized specialist in the paper industry.

Paper Materials Library

<u>Index</u>	<u>Compound Name</u>	<u>Index</u>	<u>Compound Name</u>
6	18 point coated carton newsback paper-back side	107	Chalk - calcium carbonate 90% brightness
5	18 point coated carton newsback paper-coated side	250	Chemical Pulping Aid - Petro AA liquid alkylated naphthalene sulfonat
216	2-deoxy-d-glucose	249	Chemical pulping aid - D-Lig 69 surfactant blend
12	42# Release paper-release side	291	Citric Acid, Monohydrate
21	50# lightweight coated offset paper	245	Clarification aid - Ultrion 8157 aqueous solution of aluminum hydroxy
13	80# Stamp base release paper	110	Clay coating - Alphatex
50	Adhesive (front seal)	112	Clay coating - DB-Plate
53	Adhesive - Resyn Dex	114	Clay coating - Hydragloss 90
52	Adhesive - Resyn Patch (R)	119	Clay coating - Kaofine 90 EGC
17	Adhesive post-it note	111	Clay coating - Nuclay
16	Adhesive-pressure sensitive labels	113	Clay coating - Ultra Gloss 90
132	Agarose	57	Coating Lubricant - Berchem 4000 polyethylene emulsion
257	Alcosperse 149 - sodium polyacrylate	58	Coating Lubricant - Berchem 4095 modified glycerides
261	Alcosperse 980 sodium anionic terpolymer	56	Coating Lubricant - Berchem 4113 modified glycerides
255	Alcostat 167 - cationic polyelectrolyte	60	Coating Lubricant - Berchem 4551 modified glycerides
96	Alkaline boilout additive - aqueous solution of a caustic solution of	59	Coating Lubricant - Berchem 4569 modified glycerides
108	Alkaline boilout additive - aqueous solution of tetrasodium EDTA and	273	Coating Lubricant - calcium stearate dispersion
77	Alum - aluminum sulfate	268	Coating binder - anionic emulsion of carboxy modified styrene butadie
137	Amyloid	243	Coating binder - carboxylated styrene/butadiene polymer
125	Apsen holocellulose	70	Compressor Oil - Mobil Rarus 427
126	Arabinogalactan hemicellulose	54	Conductive polymer - Poly(dimethyldiallylammonium chloride) quaternar
30	Bento H - filler/coating pigment	55	Conductive polymer - cationic acrylic polymer quaternary ammonium hom
29	Bentolite - filler/coating pigment	274	Copier toner (ether extract) - styrene acrylate copolymer, carbon bla
271	Binder - Hycar 26237 acrylic latex emulsion	297	Copier toner - styrene acrylate copolymer, carbon black, polypropylen
104	Biocide - aqueous solution of substituted isothiasolinone	136	D-cellobiose
106	Biocide/slime control agent - Slimetrol RX38A	134	D-cellobiose
105	Biocide/slime control agent - Slimetrol RX68	241	Defoamer
230	Black liquor	74	Defoamer
45	Calcined clay and latex	48	Defoamer
277	Calcined kaolin clay	73	Defoamer - Advantage 833 foamer
275	Calcium carbonate	83	Defoamer - Foamtrol 2000
240	Calcium stearate based coating lubricant	82	Defoamer - Foamtrol 800
251	Carasol Red 3BF liquid diazo dye	71	Defoamer - hydrocarbon oil base
23	Carbonless copy form-CFB - CB side	62	Defoamer - liquid emulsion of organic hydroxy coumpounds, fatty ascid
22	Carbonless copy form-CFB - CF side	259	Defoamer - nonionic surfactant
181	Carrageenan - Type III kappa Carrageenan from Eucheuma cottonii veget	41	Defoaming compound - Vinbreak 86
252	Carta yellow HPS liquid azo dye	85	Deposit control additive - C5 A821
224	Casein - KBr disk	84	Deposit control additive - Detac 8517
19	Cast coated paper C-1-S coated side	89	Deposit control additive - aqueous solution of an oxyalkylated amine,
20	Cast coated paper C-1-S reverse side	149	Disaccharide
178	Cellobiitol		
226	Cellosize - hydroxyethyl cellulose QP-300		
225	Cellosize - hydroxyethyl cellulose QP-4400		
227	Cellosize - hydroxyethyl cellulose QP-52000		
135	Cellulose - aspen meal		
188	Cellulosic - xanthan		

Paper Materials Library

<u>Index</u>	<u>Compound Name</u>	<u>Index</u>	<u>Compound Name</u>
260	Displex N40V - aqueous acrylic polymer	196	Hemicellulose - mannan crystal from slash pine
79	Dye - Fastusol C Yellow 97L	193	Hemicellulose - tamanind xyloglucan
78	Dye - Fastusol red dye 51L	217	Hemicellulose - xylose
80	Dye - Solar Blue 07L	200	Hemicellulose 4-o-glucosyl-d-mannose
103	Dye DUPLICATE	195	Hemicellulose - Stractan II (arabinogalactan)
102	Dye DUPLICATE	141	Heptaacetyl-cellobiose
124	Esparto xylan hemicellulose	234	Heptadecanoic acid
95	Fabric cleaner - aqueous solution of oxyalkylates	187	Holocellulose - amabilis fir
87	Felt Conditioner - CC6597	190	Holocellulose - incense cedar
86	Felt conditioner - CC6644	180	Holocellulose - incense cedar
81	Felt conditioner - custome clean N-CCC015	191	Holocellulose - oak
44	Felt softner/conditioner	186	Holocellulose - white spruce
221	Filter agent - high purity celite	203	Holocellulose from black spruce
286	Fine particle amorphous silica gel	290	Hydroxyethylcellulose - Natrosol
242	Flocculant - polyquaternary amine	285	Indicator for safety paper - liquid benzothiazole
265	Fluorescent whitening agent - Tinopal PT liquid triazinyl stilbene	43	Industrial felt wash conc. contains sodium metasilicate anhydrous
93	Foam Control Chemical	24	Ink Jet paper
90	Foam control chemical - blend of a polyglycol ester and a polyether s	27	Ink Jet plotter film - matte
91	Foam control chemical - polyglycol ester	28	Ink Jet plotter film - matte reverse side
72	Fortified, extended, liquid rosin sizing agent	147	Inositol
202	Glucose Polymer	63	Internal sizing agent - acrylate polymer dispersion
127	Glucose polymer	276	Kaolin (China Clay)
150	Glycoside - methyl-p-D-glucopyranoside-p-methylglucoside	223	Kaolin - acid washed
37	Guar gum from corn cobs	35	Kraft lignin - Curan 100
145	Gum Arabic	34	Kraft lignin - Diwatex 100
128	Gum Arabic	33	Kraft lignin - Diwatex 200
138	Gum xanthan - from xanthomonas campestris	209	Lignin
140	Hemicellulase	4	Low density SBS board-back side
139	Hemicellulase - from aspergillus niger	3	Low density SBS board-coated side
142	Hemicellulose	10	Metallic coated C-1-S paper gold coated side
143	Hemicellulose	11	Metallic coated C-1-S paper reverse side
36	Hemicellulose	18	Metallizing base paper
189	Hemicellulose - 4-o-methyl-glucuronoxylan-from birch paper (crude)	233	Methyl stearate
130	Hemicellulose - birch wood xylan crystals	232	Microcrystalline cellulose
129	Hemicellulose - birch xylan	287	Mineral filler and pigment - calcium carbonate
208	Hemicellulose - diborane reduced 4-o-methylglucuronoxylan	184	Modified hemicellulose - methyl-beta-arabinose
179	Hemicellulose - galactoglucomannan	198	Modified hemicellulose - methylated xylan
207	Hemicellulose - galactoglucomannan from 24% potassium hydroxide extra	183	Modified hemicellulose - xylan acetate
144	Hemicellulose - galactoglucomannan from Douglas Fir	270	Modified starch - quaternary ammonium hydroxyethyl starch ether
199	Hemicellulose - galactoglucomannan from red cedar	214	Monosaccharide - l-rhamnose A deoxyhexose monosaccharide
133	Hemicellulose - glucomannan (acetylated) from Parana Pine (Brazil)	205	N-Butyl Glucoside
201	Hemicellulose - glucomannan (crystalline) from tubera salco	101	Nalclean liquid - phosphoric acid solution containing oxyalkylates
		9	No. 1 Coated offset-gloss paper
		2	No. 3 coated offset-gloss paper
		1	No. 5 lightweight coated offset- gloss paper
		246	Nonionic surfactant - polyalkylene oxide based - Lionsurf 777

Paper Materials Library

<u>Index</u>	<u>Compound Name</u>	<u>Index</u>	<u>Compound Name</u>
247	Nonionic surfactant polyalkylene/fatty acid blend - Lionsurf 778	156	Pulp extractive - softwood bleached kraft - alcohol/toluene extract
248	Nonionic surfactant polyalkylene/fatty acid blend - Lionsurf 779	154	Pulp extractive - softwood bleached kraft - alcohol/toluene extract
258	Nopco DSX 2000exp	157	Pulp extractive - softwood unbleached kraft - alcohol/toluene extract
176	Offset spray powder	160	Pulp extractive - southern hardwood bleached kraft - alcohol/toluene
306	Paper dye - Carasol red / diazo dye	159	Pulp extractive - western softwood bleached kraft - alcohol/toluene e
302	Paper dye - Carasol red / diazo dye	299	Pulping Enzyme - SP-342 Cellulase
303	Paper dye - Carasol red / diazo dye	300	Pulping enzyme - Celluclast 1.5L
305	Paper dye - Carasol red / diazo dye	301	Pulping enzyme - Pulpzyme HA
304	Paper dye - Carasol red / diazo dye	231	Recovery boiler scale
64	Paper dye - Fastusol C Yellow	14	Release Paper - release side
98	Paper making aid - colloidal silica dispersion	15	Release Paper - reverse side
99	Paper mill process additive - aqueous solution of a polyquaternaryam	61	Release agent - Release Agent 565
66	Paper sizing agent - Bersize 6400	220	Resin acid - dehydroabietic acid 99+%
146	Peach Gum	123	Retention Aid and Flocculant / high molecular weight polyacrylamide
292	Peat	174	Retention aid - King Fix-Z neat dimethyldiallyl ammonium chloride sul
177	Pectin from incense cedar	88	Retention aid - PolyPlus 130
219	Pentose sugar	92	Retention aid - acrylamide/acrylate polymer in a hydrocarbon solvent
289	Pigment/filler - M92404-SL mixture of hydrous and calcined kaolin slu	283	Retention aid - liquid polymer mixture derived from dimer acids and p
192	Pinitol	244	Retention aid - polyquaternary ammonium salt
46	Pitch Dispersant - Buckman 251	38	Rosin size - Plasmibe PLH-50
47	Pitch Dispersant - Nalco 7652	76	Rosin sizing agent - aliphatic urethane acrylate
49	Pitch dispersant	94	Scale/pitch control additive - aqueous solution of pyrophosphate
97	Pitch dispersant - aqueous solution of an acrylate polymer	115	Silicate coating - Hydragloss
218	Plant sterol - beta-sitosteril, 50% contains ~40% campesterol 22,23-d	116	Silicate coating - Norplex 604
26	Plotter paper / glossy	253	Silicone Spray
25	Plotter paper / non-glossy	175	Sizing additive - paraffin wax emulsion
212	Polysaccharide - Laminarin from Laminaria digitate (brown seaweed)	238	Sizing agent (old/polymerized) - Keydime E alkylketene dimer
213	Polysaccharide - Lichenan from Usnea barbata, a glucose polysaccharid	237	Sizing agent - Keydime d-10 alkylketene dimer
298	Polyvinyl Alcohol	263	Sizing agent - ketene dimer emulsion Hercon 70
293	Polyvinyl alcohol - 95PC-016	264	Sizing agent - ketene dimer emulsion Hercon 76
296	Polyvinyl alcohol - 95PC-016 as KBr disk	288	Sizing agent - resin mixturye of methyl and isobutyl partial esters o
295	Polyvinyl alcohol - Vinol 203 partially hydrolyzed	222	Sodium carbonate
294	Polyvinyl alcohol - Vinol 325 fully hydrolyzed	168	Solvent extractive of paper - 80# stamp base release ether extract
100	Preservative - aqueous solution of glutaraldehyde	166	Solvent extractive of paper - carbonless form 4-ply ether extraction
228	Process scale - brown stock washer scale	163	Solvent extractive of paper - cast coated C-1-S ether extract
206	Psyllium Seed	164	Solvent extractive of paper - coated offset gloss ether extract
153	Pulp extractive - hardwood bleached kraft - alcohol/toluene extract	162	Solvent extractive of paper - ether extract of C-1-S carrier stock
161	Pulp extractive - maple some softwood bleached kraft - alcohol/toluene		
152	Pulp extractive - northern hardwood bleached kraft - alcohol/toluene e		
155	Pulp extractive - northern softwood bleached kraft - alcohol/toluene e		
158	Pulp extractive - softwood alpha - alcohol/toluene extract		



Paper Materials Library

<u>Index</u>	<u>Compound Name</u>	<u>Index</u>	<u>Compound Name</u>
165	Solvent extractive of paper - low density SBS board ether extract	279	Surfactant - polyalkyleneoxide derivative
169	Solvent extractive of paper - metallic coated C-1-S ether extract	278	Surfactant mixture - polyalkyleneoxide derivative
167	Solvent extractive of paper - premium no. 1 coated offset/dull ether	262	Surfactant thickening agent - Rewoteric AM TEG tallow bis-hydroxyethyl
254	Special Purpose Wax	32	Synthetic smectite clay - laponite S sodium magnesium lithium fluoros
272	Specialty coating resin - HRJ 2969 alkylphenol novolac resin dipersio	31	Synthetic smectite clay - laponite S/ sodium magnesium lithium fluoro
109	Starch - Cato 232	118	Talc - Mistron 100
121	Starch - Filmflex 60 Corn starch	229	Tall oil soap - dried solids
117	Starch - Microcat 110	215	Trisaccharide
120	Starch - Penford Starch PG 280	197	Trisaccharide
236	Starch - Sta-Lok 400 cationic potato starch	7	Unbleached Kraft paper C-1-S carrier Sstock coated side
269	Starch - hydroxyethyl starch ether	8	Unbleached Kraft paper C-1-S carrier stock back side
122	Starch and 2-hydroxy-3- trimethylammonium chloride propyl ether	75	Urethane Acrylate Resin
170	Starch enzyme - Tenase L-340 (neat)	182	Viscose Rayon
68	Steam turbine oil - Mobil DTE 797	185	Viscose staple
69	Steam turbine oil - Mobil DTE Oil heavy/medium grade	51	Water based adhesive - Resyn Patch
235	Stearic acid	67	Water treatment additive, cationic emulstion polymer
239	Styrene/Butadiene copolymer (polymerized)	65	Wet strength agent - cationic, polyamide-epichlorhydrin resin
131	Sucrose - sugar beet	173	Wet strength resin - Amres 8870 neat cationic polyamide resin
267	Surfactant - DP SC-248-33 blend of nonionic and cationic surfactants	266	Wet strength resin - Casamid C-12 polyamide wet-strength resin
172	Surfactant - LS 729 (neat)	39	Wet strength resin - Casco resin C382 urea formaldehyde
171	Surfactant - LS 769 (neat)	40	Wet strength resin - Fibrabon 33
284	Surfactant - Product 87122 fatty acid	42	Wire (forming fabric) passivator
256	Surfactant - Witconate AOS alkyl (C14- C16) olefin sulfonate, sodium s	148	Wood Polysaccharide
282	Surfactant - fatty acid emulsion	151	Wood polysaccharide
280	Surfactant - mixture of alkoxyated compounds	211	Alpha-Methyl-d-xyloside
281	Surfactant - mixture of nonionic surfactants and terpene hydrocarbons	210	Beta-Methyl-d-xyloside
		204	D+Glucosamine HCl
		194	I-Tartaric Acid