



PARALOID® Acrylic Resins

Thermoplastic Solution Grade & Solid Grade Acrylic Resins

SOLVENT SELECTION

Solid Grade

PARALOID GRADES

		A-11	A-12	A-21	B-44	B-48N	B-60	B-66	B-67	B-72	B-82
	Solubility Parameters	9.4	9.4	9.4	9.4	9.3	9.2	9.0	8.2	9.3	9.4
ALCOHOLS											
3A alcohol	13.0	SG ^{1H}	I	SG ^{1H}	SG	SG ^{2H}	SG ^H	SG	5200	SG ^{2H}	SG ^{1H}
Isopropanol	11.5	I	I	I	I	I	I	I	2800	I	I
n-Butanol	11.4	I	I		I	I	I	94 ¹	2500	130 ¹	I
Isobutanol	10.5	I	I		I			5600 ^{2H}	3200	I	I
n-Amyl alcohol	10.9	I	I		I		I	I	3200	I	I
Diacetone alcohol	9.8	350 ¹	350 ¹	680 ¹	10000	460 ¹	7800	6200	2300	3500	3000
ESTERS											
Methyl acetate	9.5	740 ²	380 ²	120 ¹	3900	5000	1600	700	320	1000	700 ^H
-Ethyl acetate	9.1	69 ¹	50 ¹	1110 ^H	1800	7700 ^H	920	940	240	500	610
n-Propyl acetate	8.8	2500 ²	1080 ²	2240	1800	8300 ^H		570	180	480 ^H	480
n-Butyl acetate	8.5	4100 ²	115 ¹	6550 ^H	2600	9200 ^H	1730 ^H	780	250	560	630
t-butyl acetate*		PS	PS	I	6630 ⁴⁰	6360 ⁴⁰	275 ³⁰	1230 ⁴⁰	49.2 ³⁰	1550 ⁴⁰	1370 ⁴
Isobutyl acetate	8.3	5100 ²	3070 ²	8450 ^H	3100	8400 ^H		960	240	660 ^H	700
Amyl acetate	8.5	710 ¹	PS		5600		3000 ^H	1100	320	850	980
2-Ethyl hexyl acetate	7.9	I	I	I	I	I	PS	6900	770	I	I
duPont DBE	8.1	960 ¹	460 ¹	1320 ¹	340 ¹	520 ¹	100 ¹	9200	4800	7900 ^H	6400 ^f
Exxate 600	8.3	SG ^{1H}	I	SG ^H	340 ^{2H}	120 ^{1H}	5400 ^H	2600	540	2500	2200
Exxate 700	8.2	SG ¹	I	SG ^H	2600 ^{2H}	280 ^{1H}	740 ²	3500	800	3700	3900 ^f
Exxate 800	8.1	SG ^{1H}	I	I	SG ^{2H}	540 ^{1H}	120 ^{1H}	5100	1300	4700	5000 ^f
Exxate 900	8.1	I	I	I	SG ^H	SG ^{2H}	160 ^{1H}	100 ^{1H}	1700	8200	6000 ^f
GLYCOL AND ETHER ESTER DERIVATIVES											
Arcosolv™ PM*		423 ²⁰	324 ²⁰	610 ²⁰	6070 ⁴⁰	8050 ⁴⁰	3630 ⁴⁰	2140 ⁴⁰	865 ⁴⁰	2400 ⁴⁰	1920 ⁴
PM Acetate	9.2	230 ¹	165 ¹	620 ¹	4900	100 ¹	3950	2300	760	1300	1300

Butyl Cellosolve	9.9	I	I	I	24000	PS	PS	17000	2700 ^H	3200	4500 ^t
Carbitol acetate	9.5	18000 ²	9200 ²		18000			9800	3300	4800	3700
Butyl Carbitol acetate	9.0	2800 ²	I		25000		5500	10000	2700	5500	5100
Ektapro EEP	9.0	320 ¹	220 ¹	60 ¹	7800	140 ¹	340 ²	2500	880	2700	2600
HYDROCARBONS											
Toluene	8.9	500 ²	6200	590	1400	5600	530	360	460 ³	590	530
Xylene	8.8	PS	15,000	PS	3600	580 ²	950	590	300	980	980
Heptane	7.4	I	I	I	I	I	I	I	550	I	I
VM&P naphtha	7.6	I	I	I	I	I	I	I	560	I	I
Mineral spirits	7.6	I	I	I	I	I	I	I	1800	I	I
Aromatic 100	8.6	I	I	I	I	120 ¹	2250	2500	280	1100 ^H	230 ²
Aromatic 150	8.5	I	I	I	I	920 ²	8800	320 ²	590	2700 ^H	I
KETONES											
Acetone	10.0	1100	2750	380	460	3000	320	110	94	200	140
Methyl ethyl ketone	9.3	8500	3500	320	510	5300	310	200	110	250	200
n-methyl pyrrolidone*		4930 ³⁰	2600 ³⁰	4640 ³⁰	ND	10900 ⁴⁰	1750 ⁴⁰	1830 ⁴⁰	924 ⁴⁰	3000 ⁴⁰	2630 ⁴

Code:

H Hazy solution or soluble gel	PS Partially soluble	¹ Determined at 20% solids.
I Insoluble	SG Swelled gel	² Determined at 30% solids.
D Dispersed		³ Determined at 50% solids.
		⁴ Determined at 25% solids.
		*Superscript indicates % solids.

Values are Viscosity, cP, at 25°C of a 40% solids solution, except as noted

