

ACRYLITE PLUS® impact acrylic molding & extrusion compounds

Physical Properties

Property	ASTM Method	ACRYLITE PLUS ZK-6 Compound	ACRYLITE PLUS ZK-D Compound	ACRYLITE PLUS ZK-X Compound	ACRYLITE PLUS ZK-M/ZK-5 Compound	ACRYLITE PLUS ZK-F Compound	ACRYLITE PLUS ZK-P Compound	ACRYLITE PLUS ZK-V Compound	ACRYLITE PLUS zdf Compound
OPTICAL									
Light Transmission, %	D-1003	91.5	91.5	91.5	91.5	92	92	91.5	85
Haze, %	D-1003	1	1	1	1	1	1	1	96
Refractive Index	D-542	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49
RHEOLOGICAL									
Avg Melt Flow, g/10 min @ 230°C & 3.8 kg	D-1238	1.7	5.8	1.0	3.5	13.0	4.5	2.0	3.1
MECHANICAL									
Tensile Strength, psi (MPa)	D-638	6,300 (43.4)	6,400 (44.1)	9,300 (64.1)	8,500 (58.6)	8,200 (56.2)	10,500 (72.4)	9,100 (62.7)	6,400 (44.1)
Tensile Modulus, x10 ⁹ psi (GPa)	D-638	0.22 (1.5)	0.23 (1.6)	0.37 (2.5)	0.32 (2.2)	0.33 (2.3)	0.40 (2.8)	0.44 (3.0)	0.25 (1.7)
Tensile Elongation @ Yield, %	D-638	5	5	5	5	5	5	5	4
Tensile Elongation @ Break, %	D-638	55	40	25	30	25	20	15	20
Flexural Strength, psi (MPa)	D-790	8,600 (59.3)	9,400 (64.8)	15,000 (103.4)	13,000 (89.6)	10,000 (68.9)	15,700 (72.4)	15,300 (105.5)	10,000 (69.0)
Flexural Modulus, x10 ⁹ psi (GPa)	D-790	0.22 (1.5)	0.23 (1.6)	0.35 (2.5)	0.32 (2.2)	0.29 (2.0)	0.40 (2.8)	0.44 (3.0)	0.26 (1.8)
Notched Izod, ft-lb/in (J/m) on 1/4" (6.35mm) bar @ 23°C	D-256	1.1 (58.1)	1.1 (58.1)	0.85 (44.9)	0.85 (44.9)	0.75 (39.6)	0.60 (31.5)	0.4 (21.0)	1.0 (52.5)
@ 0°C	D-256	0.70 (36.8)	0.65 (34.1)	0.60 (31.7)	0.50 (26.3)	0.45 (23.9)	0.35 (18.5)	0.20 (10.5)	0.5 (26.3)
Rockwell Hardness, M scale	D-785	40	33	70	68	65	80	80	44
PHYSICAL									
DTL, °F (°C) @ 264 psi, annealed	D-648	194 (90)	190 (88)	200 (93)	196 (91)	196 (91)	198 (92)	203 (95)	185 (85)
Vicat Softening Point, °F (°C)	D-1525	201 (94)	201 (94)	230 (110)	210 (99)	208 (98)	219 (104)	217 (103)	226 (108)
Specific Gravity	D-792	1.16	1.16	1.16	1.18	1.17	1.18	1.18	1.15
Water Absorption, % max	D-570	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Mold Shrinkage, in/in, mm/mm	D-551	0.004-0.007	0.003-0.006	0.004-0.007	0.003-0.006	0.003-0.006	0.003-0.006	0.004-0.007	0.003-0.006
Coefficient of Linear Expansion in/in/°F, 32-212° (mm/mm °C, 0-100°C)	D-696	0.00004 (0.000072)	0.000052 (0.000094)	0.00004 (0.000072)	0.00004 (0.000072)	0.00004 (0.000072)	0.00004 (0.000072)	0.00004 (0.000072)	0.00005 (0.00009)
Flammability		UL 94 HB	UL 94 HB	UL 94 HB	UL 94 HB	UL 94 HB	UL 94 HB	UL 94 HB	UL 94 HB
ASTM CLASS	D-788-84	-	-	-	-	-	-	-	-
	D-788-93	PMMA0231V1	PMMA0221V3	PMMA0221V1	PMMA0221V3	PMMA0221V5	PMMA0211V3	PMMA0211V2	PMMA0231V2