

General Properties of Delpowder™

AsahiKASEI

Item	ISO Method	Unit	General Grades								High Heat-resistant Grades				
			720V	560F	60N	80NM	80N	80HD	70HS	80NB	SK420N	SK430N	SK540N	PM120N	PM130N
			Super-High Flow	High Flow	Good Flow	Good Flow & High Heat	High Heat	Extrusion	Solvent resistant	Solvent resistant	High Heat-resistant & Optics	High Heat-resistant & Optics	High Heat-resistant & Optics	High Heat-resistant	High Heat-resistant
1. Rheological Properties															
Melt Mass-flow Rate (230 °C, 37.3 N)	1133	g/10 min	2.5	1.3	8.0	5.5	2.1	1.8	1.1	0.5	2.1	1.8	1.3	1.3	1.8
2. Mechanical Properties *1)															
Tensile modulus	527-1/1A/1	MPa	3200	3300	3300	3300	3300	3300	3300	3300	3400	3400	3500	3500	3300
Tensile strength at break	527-1/1A/5	MPa	48	70	72	75	77	77	77	77	74	78	77	77	77
Tensile strain at break	527-1/1A/5	%	3	5	5	5	6	6	8	8	4	4	4	5	5
Charpy impact strength (Unnotched)	179/1eU	kJ/m²	15	20	20	20	22	22	22	24	17	17	16	16	16
Charpy impact strength (Notched)	179/1eA	kJ/m²	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.0	1.0	0.9	1.2	1.2
3. Thermal properties *1)															
Temperature of deflection under load	75-1,2	°C	95	88	91	100	100	98	97	96	109	110	118	118	110
Vicat softening temperature	306 B50	°C	105	94	98	109	109	108	104	104	117	118	123	123	116
4. Physical properties *1)															
Water absorption (23 °C, 24 hr)	62 method 1	%	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Density	1183	g/cm³	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
5. Specific properties not specified in ISO 10350 *1)															
Refractive index	489	—	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.50	1.51	1.50
Total luminous transmittance	13468-1	%	92	92	92	92	92	92	92	92	92	92	91	91	92
Flexural modulus	178	MPa	3200	3300	3300	3300	3300	3300	3300	3300	3200	3200	3200	3500	3300
Flexural strength	178	MPa	87	120	120	120	130	130	130	130	103	110	110	120	130
Rockwell hardness M scale	2039-2	—	95	92	95	98	100	98	95	95	100	100	100	103	99
Mold shrinkage	ASAHIKASEI PMMA method	%	0.2 ~ 0.6	0.2 ~ 0.6	0.2 ~ 0.6	0.2 ~ 0.6	0.2 ~ 0.6	0.2 ~ 0.6	0.2 ~ 0.6	0.2 ~ 0.6	0.3 ~ 0.8	0.3 ~ 0.8	0.3 ~ 0.8	0.2 ~ 0.6	0.2 ~ 0.6

*1) Delpowder was pelletized, and the specimens were prepared by injection molding from the obtained pellets and performed the test.

NOTE : The values in the above Table are representative values obtained using the noted test methods. Please use these values as a reference when selecting the most suitable grade for each respective use.
In addition, these values may change due to the improvement of properties.