Properties of DELPET™ Standard grades

AsahiKASEI
ASAHI KASEI CORPORATION

Property	Method	Units	720V	70FR	560F	560FM	70NH	60N	80NH	80HDF	80N	80NR	80NR-S	80HD	LP-1	80NB
1. Rheological Properties																
Melt mass-flow rate (230℃、3.8kg)	1133 cond 13	g/10min	25.0	21.0	13.0	13.0	10.5	8.0	5.5	2.3	2.0	2.1	2.2	1.8	1.1	0.5
Spiral flow length Thickness:2mm Cylinder Temp:250℃ Mold Temp:60℃ Pressure:75MPa	ASAHIKASEI method	cm	51	44	42	42	40	38	34	−−	27	27	28	26	24	22
2. Mechanical Properties																
Tensile modulus	527-2/1A/1	MPa	3200	3200	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300
Tensile strength at break	527-2/1A/5	MPa	48	54	70	70	67	72	75	77	77	77	77	77	77	77
Tensile strain at break	527-2/1A/5	%	3	4	5	5	5	5	5	6	6	6	6	6	8	8
Charpy impact strength (Unnotched)	179/1eU	KJ/m^2	15	17	20	20	19	20	20	22	22	22	22	22	22	24
Charpy impact strength (Notched)	179/1eA	KJ/m^2	1.2	1.2	1.3	1.3	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4
3. Thermal properties																
Temperature of deflection under load	75-1 75-2	℃	95	94	88	88	97	91	100	98	100	100	100	98	97	96
VICAT softening temperature	306 B 50	℃	105	102	94	94	105	98	109	108	109	108	108	108	104	104
4. Physical properties																
Water absorption at 23℃	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	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	1.19
5. Specific properties (not in ISO 10350)																
Refractive index	489	—	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49
Total luminous transmittance	13468-1	%	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Flexural modulus	178	MPa	3200	3200	3200	3200	3200	3300	3300	3300	3300	3300	3300	3300	3300	3300
Flexural strength	178	MPa	87	86	120	120	120	120	120	130	130	130	130	130	130	130
Rockwell hardness	2039-2	M scale	95	95	92	92	95	95	98	98	100	100	100	98	95	95
		R scale														
Mold shrinkage	ASAHIKASEI method	cm/cm	0.002～0.006	0.002～0.006	0.002～0.006	0.002～0.006	0.002～0.006	0.002～0.006	0.002～0.006	0.002～0.006	0.002～0.006	0.002～0.006	0.002～0.006	0.002～0.006	0.002～0.006	0.002～0.006

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. □