

General properties of DELPETTM Special Grades for Light Guiding Plates

AsahiKASEI

Asahi Kasei Corporation

Item	ISO Method	Unit	70FR Super High Flow	70NH High Flow	80NH High Heat Good Flow
1. Rheological Properties					
Melt mass-flow rate (230°C、37.3N)	1133	g/10min	2 1	1 0 . 5	5 . 5
Spiral flow length Thickness : 2 mm Cylinder Temp : 250 ° C Mold Temp : 60 ° C Pressure : 75 MPa	ASAHI KASEI PMMA method	c m	4 4	4 0	3 4
2. Mechanical Properties					
Tensile modulus	527-2/1A/1	MPa	3 2 0 0	3 2 0 0	3 3 0 0
Tensile strength at break	527-2/1A/5	MPa	5 4	6 7	7 5
Tensile strain at break	527-2/1A/5	%	4	5	5
Flexural modulus	178	MPa	3 2 0 0	3 2 0 0	3 3 0 0
Flexural strength	178	MPa	8 6	1 2 0	1 2 0
Charpy impact strength (Unnotched)	179/1eU	kJ/m ²	1 7	1 9	2 0
Charpy impact strength (Notched)	179/1eA	kJ/m ²	1 . 2	1 . 2	1 . 3
3. Thermal Properties					
Temperature of deflection under load (1.8 MPa)	75-1 75-2	°C	9 4	9 7	1 0 0
VICAT softening temperature	306 B 50	°C	1 0 2	1 0 5	1 0 9
4. Other Properties					
Water absorption (23 ° C, 24 hr)	62 method 1	%	0 . 3	0 . 3	0 . 3
Density	1183	g/cm ³	1 . 1 9	1 . 1 9	1 . 1 9
Refractive index	489	-	1 . 4 9	1 . 4 9	1 . 4 9
Total luminous transmittance	13468-1	%	9 2	9 2	9 2
Rockwell hardness M scale	2039-2	-	9 5	9 5	9 8
Mold shrinkage	ASAHI KASEI PMMA method	%	0.2~0.6	0.2~0.6	0.2~0.6

NOTE: The above values are representative values of natural colors and are not standard values or guaranteed.

The test piece preparation conditions, annealing conditions, and test conditions in accordance with the conditions specified or recommended by the PMMA resin standard of ISO8257-2. 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.