

General properties of DELPET™ PB Series

AsahiKASEI

Asahi Kasei Corporation

Item	ISO Method	Unit	General	BIMODAL		
			(General)	(High flow)	(Solvent Resistance)	(Good flow & Solvent Resistance)
			PB01	PB21	PB22	PB23
1. Rheological Properties						
Melt mass-flow rate (230℃、37.3N)	1133	g/10min	2. 0	1. 8	0. 6	1. 0
Spiral flow length Thickness : 2 mm Cylinder Temp : 250 ° C Mold Temp : 60 ° C Pressure : 75 MPa	ASAHI KASEI PMMA method	c m	2 7	3 3	2 7	3 0
2. Mechanical Properties						
Tensile modulus	527-2/1A/1	MPa	3 3 0 0	3 3 0 0	3 3 0 0	3 3 0 0
Tensile strength at break	527-2/1A/5	MPa	7 7	7 7	7 7	7 7
Tensile strain at break	527-2/1A/5	%	6	5	7	6
Charpy impact strength (Unnotched)	179/1eU	kJ/m ²	2 2	2 2	2 4	2 4
Charpy impact strength (Notched)	179/1eA	kJ/m ²	1. 4	1. 3	1. 4	1. 4
Flexural modulus	178	MPa	3 3 0 0	3 3 0 0	3 3 0 0	3 3 0 0
Flexural strength	178	MPa	1 3 0	1 3 0	1 3 0	1 3 0
3. Thermal Properties						
Temperature of deflection under load (1.8 MPa)	75-1 75-2	°C	1 0 0	1 0 0	9 8	9 8
VICAT softening temperature	306 B 50	°C	1 0 8	1 0 8	1 0 6	1 0 6
4. Other Properties						
Brightness L*	SCE measurement mode (Illuminant : D65/10° FOV)	-	<1. 0	<1. 0	<1. 0	<1. 0
Chromaticity a*／b*			-0.3/-1.3	-0.3/-1.3	-0.3/-1.3	-0.3/-1.3
Water absorption (23 ° C, 24 hr)	62 method 1	%	0. 3	0. 3	0. 3	0. 3
Density	1183	g/cm ³	1. 1 9	1. 1 9	1. 1 9	1. 1 9
Rockwell hardness M scale	2039-2	-	1 0 0	1 0 0	9 5	9 8
Mold shrinkage	ASAHI KASEI PMMA method	%	0.2~0.6	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.

General properties of Jet-black scratch resistant grade

AsahiKASEI

Asahi Kasei Corporation

Item	ISO Method	Unit	General		BIMODAL
			(General)	(High flow)	(Good flow & Solvent Resistance)
			PB013	PB033	PB233
1. Rheological Properties					
Melt mass-flow rate (230℃、37.3N)	1133	g/10min	2.0	6.0	1.0
Spiral flow length Thickness : 2 mm Cylinder Temp : 250 ° C Mold Temp : 60 ° C Pressure : 75 MPa	ASAHI KASEI PMMA method	cm	2.7	3.4	3.0
2. Mechanical Properties					
Tensile modulus	527-2/1A/1	MPa	3300	3300	3300
Tensile strength at break	527-2/1A/5	MPa	7.7	7.5	7.7
Tensile strain at break	527-2/1A/5	%	6	5	6
Charpy impact strength (Unnotched)	179/1eU	kJ/m ²	2.1	1.9	2.2
Charpy impact strength (Notched)	179/1eA	kJ/m ²	1.2	1.2	1.2
Flexural modulus	178	MPa	3300	3300	3300
Flexural strength	178	MPa	130	120	130
3. Thermal Properties					
Temperature of deflection under load (1.8 MPa)	75-1 75-2	℃	100	100	98
VICAT softening temperature	306 B 50	℃	109	109	107
4. Other Properties					
Brightness L*	SCE measurement mode (Illuminant : D65/10° FOV)	-	<1.0	<1.0	<1.0
Chromaticity a*／b*			0.1/-0.4	0.1/-0.4	0.1/-0.4
Water absorption (23 ° C, 24 hr)	62 method 1	%	0.3	0.3	0.3
Density	1183	g/cm ³	1.19	1.19	1.19
Rockwell hardness M scale	2039-2	-	100	98	98
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.