

POKETONE® M43AG6A

Description

30% glass-reinforced high-impact injection molding grade

Physical Properties

	ASTM	Value	ISO	Value
Density	D792	1.48 g/cm ³	1183	1.48 g/cm ³
Shore D hardness	D2240		868	
Hardness Rockwell	D785		2039	
Water absorption equilibrium at RH 50%	D570		62	
Water absorption at Saturation	D570		62	
Melt flow index 240°C/2.16kg	D1238	4.4 g/10 min	1133	
	D955		294-4	
Mold Shrinkage	MD, 3 mm	0.2 %		
	TD, 3 mm	1.1 %		
	MD, 2 mm	0.1 %		
	TD, 2 mm	0.9 %		

Mechanical Properties

	ASTM	Value	ISO	Value
Tensile strength at yield	D638	130 MPa	527-1	120 MPa
Tensile modulus	D638		527-1	8000 MPa
Tensile elongation at yield	D638		527-1	
Tensile elongation at break	D638	3.0 %	527-1	3.5 %
Flexural strength	D790	191 MPa	178	175 MPa
Flexural modulus	D790	6,800 MPa	178	5,800 MPa
Unnotched Izod impact strength	D256		180/1U	
Notched Izod impact strength	D256		180/1A	
Unnotched Charpy impact strength	D6110		179/1eU	
Notched Charpy impact strength	D6110		179/1eA	
			23 °C	13 kJ/m ²
			-40 °C	8 kJ/m ²
Falling dart impact strength			6603-2	

Thermal Properties

	ASTM	Value	ISO	Value
Melting temperature	D3418	222 °C	11357	222 °C
Coefficient of linear thermal expansion, 25 ~ 55°C	E831		11359	
Vicat softening point	D1525		306/B50	
	5 kg		50 N	
Heat deflection temperature	D648		75	
	66 psi	215 °C	0.45 MPa	
	264 psi	210 °C	1.8 MPa	209 °C

Injection Molding Processing Conditions

		Value
Pre-drying	Drying temperature	80 °C
	Drying time	3 ~ 4 hr
	Suggested max moisture	0.20 %
Temperature	Nozzle temperature	240 °C
	Zone 1 temperature	230 °C
	Zone 2 temperature	220 °C
	Zone 3 temperature	215 °C
	Zone 4 temperature	210 °C
	Processing temperature	225 ~ 240 °C
	Mold temperature	60 ~ 80 °C
Pressure	Back pressure	0.294 ~ 0.686 MPa
Speed	Screw Speed	50 ~ 100 rpm

* The data listed here is not for specification warranty, but typical value.

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