

POKETONE[®] M43AG6A

General

Feature	30% glass-reinforced high-impact injection molding grade
Special Characteristics	Low GWP, Low NVH, High impact
Processing method	Injection molding
Certification	RoHs, Free of PAHs, Free of Halogen, SVHC
Colors available	Black
UL File number	-
Form	Pellet
Applications	Automotive ECU cover

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 5 kg		306/B50 50 N	
Heat deflection temperature	D648		75	
	66 psi 264 psi	215 °C 210 °C	0.45 MPa 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	80 ~ 120 °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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