

POKETONE® M13FG6A(M93FG6A)

Description

30% glass-reinforced high flow injection molding grade with Food/Drinking water Compliance

| Physical Properties | ASTM | Value | ISO | Value |
|--|----------|------------------------|-------|------------------------|
| Density | D792 | 1.46 g/cm ³ | 1183 | 1.46 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 | 46 g/10 min | 1133 | |
| | D955 | | 294-4 | |
| Mold Shrinkage | MD, 3 mm | | | |
| | TD, 3 mm | | | |
| | MD, 2 mm | | | |
| | TD, 2 mm | | | |

| Mechanical Properties | ASTM | Value | ISO | Value |
|----------------------------------|-------|-----------|---------|----------------------|
| Tensile strength at yield | D638 | 145 MPa | 527-1 | |
| Tensile modulus | D638 | | 527-1 | |
| Tensile elongation at yield | D638 | | 527-1 | |
| Tensile elongation at break | D638 | 3 % | 527-1 | |
| Flexural strength | D790 | 190 MPa | 178 | |
| Flexural modulus | D790 | 7,100 MPa | 178 | |
| 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 | 11 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 | |

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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