KEPITAL® FA-20

A conductive grade reinforced with carbon fiber
KEPITAL® FA-20 is a conductive Polyoxymethylene (POM) grade reinforced with carbon fiber. Offers excellent thermal stability and stronger resistance to alkalis than acetal homopolymer. Possesses wide range of working temperature, high stiffness, high creep strength and high tolerance to organic chemicals. Exhibits fatigue-, creep resistance, long term dimensional stability and better flow enabling high speed production. Shows resistance to friction and wear. Is suitable for processing by injection molding. Used in electrical & electronics, automotive and industrial parts.

Rheological properties

Moulding shrinkage, parallel	0.9	%	ISO 294-4, 2577

Typical mechanical properties

Stress at break, 5mm/min	100	MPa	ISO 527-1/-2
Nominal strain at break	2	%	ISO 527-1/-2
Flexural Modulus	7150	MPa	ISO 178
Flexural Strength	135	MPa	ISO 178
Charpy notched impact strength, 23°C	4	kJ/m²	ISO 179/1eA
Poisson's ratio	0.388		

Thermal properties

Melting temperature, 10°C/min	165	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	160	°C	ISO 75-1/-2

Electrical properties

Surface resistivity	1000	Ohm	IEC 62631-3-2

Other properties

Density	1430	kg/m³	ISO 1183

Processing Texts

Pre-drying	It is recommend to dry material at 80°C ~ 90°C (176°F ~ 194°F) for 3 h ~ 4 h if necessary.

Other Approvals

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OEM	Specification	Additional Information
GM	GMW16278P-POM-C3	
GM	GMP.POM.041	
Ford	WSS-M98P14-A3	ASN 9951

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Chemical Media Resistance

Standard Fuels

- ✔ ISO 1817 Liquid 1 - E5, 60°C
- ✔ ISO 1817 Liquid 2 - M15E4, 60°C
- ✔ ISO 1817 Liquid 3 - M3E7, 60°C
- ✔ ISO 1817 Liquid 4 - M15, 60°C
- ✔ Standard fuel without alcohol (pref. ISO 1817 Liquid C), 23°C
- ✔ Standard fuel with alcohol (pref. ISO 1817 Liquid 4), 23°C

Symbols used:

✔ possibly resistant
Defined as: Supplier has sufficient indication that contact with chemical can be potentially accepted under the intended use conditions and expected service life. Criteria for assessment have to be indicated (e.g. surface aspect, volume change, property change).

✘ not recommended - see explanation
Defined as: Not recommended for general use. However, short-term exposure under certain restricted conditions could be acceptable (e.g. fast cleaning with thorough rinsing, spills, wiping, vapor exposure).

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