



SABIC® SABITAL™ 90GV10

POLYOXYMETHYLENE COMPOUNDING

DESCRIPTION

SABITAL™ 90GV10 is POM copolymer compounded with glass fibers for injection molding applications, it is reinforced with ca. 10% glass fibers for application requiring high stiffness, strength and thermal property.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL PROPERTIES ⁽¹⁾			
Density	1480	kg/m ³	ISO 1183
Melt volume rate (MVR)	4.5	cm ³ /10 min	ISO 1133
MECHANICAL PROPERTIES ⁽¹⁾			
Tensile modulus (1mm/min)	4000	MPa	ISO 527-2 1A
Tensile stress at break (5mm/min)	90	MPa	ISO 527-2 1A
Tensile strain at break (5mm/min)	3.5	%	ISO 527-2 1A
Flexural modulus (23°C)	4000	MPa	ISO 178
Charpy impact strength @ 23°C	35	kJ/m ²	ISO 179/1eU
Charpy notched impact strength @ 23°C	6.0	kJ/m ²	ISO 179/1eA
THERMAL PROPERTIES ⁽¹⁾			
Melting temperature (10 °C/min)	166	°C	ISO 11357-1/-3
Deflection temperature under load DTUL (@1.8 MPa)	154	°C	ISO 75-1&2
Coeff.of linear therm. expansion (parallel)	0.6	E-4/°C	ISO 11359-2
Coeff.of linear therm. expansion (normal)	1.2	E-4/°C	ISO 11359-2

(1) Typical values; not to be construed as specification limits.

PROCESSING CONDITIONS

Injection Molding Standard injection molding machines with three phase (15 to 25D) plasticizing screws will fit.

Melt Temperature 190 – 230 °C

Mould Temperature 80 – 120 °C

STORAGE AND HANDLING

Handle in accordance with good industrial hygiene and safety practices. Provide for appropriate exhaust ventilation and dust collection at machinery. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Open containers only in well-ventilated area. Store in a dry and cool area. Keep away from heat sources and sources of ignition. Keep away from direct sunlight. Residual monomer vapors can accumulate in the headspace of closed containers.