SABIC® POM 90S

POLYOXYMETHYLENE

DESCRIPTION

SABIC® POM 90S is a medium molecular weight grade suitable for Injection molding applications for parts requiring high rigidity and strength for many applications.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL PROPERTIES [1]			
Density	1410	kg/m³	ISO 1183
Melt volume rate (MVR)	8	cm³/10 min	ISO 1133
Mold shrinkage - parallel	2	%	ISO 294-4
Mold shrinkage - normal	1.8	%	ISO 294-4
Water absorption (23°C-sat)	0.65	%	ISO 62
MECHANICAL PROPERTIES [1]			
Tensile modulus (1mm/min)	2850	MPa	ISO 527-2 1A
Tensile stress at yield (50mm/min)	64	MPa	ISO 527-2 1A
Tensile strain at yield (50mm/min)	9	%	ISO 527-2 1A
Nominal strain at break (50mm/min)	30	%	ISO 527-2 1A
Tensile creep modulus (1h)	2500	MPa	ISO 899-1
Tensile creep modulus (1000h)	1300	MPa	ISO 899-1
Flexural modulus (23°C)	2700	MPa	ISO 178
Charpy impact strength @ 23°C	180	kJ/m²	ISO 179/1eU
Charpy impact strength @ -30°C	160	kJ/m²	ISO 179/1eU
Charpy notched impact strength @ 23°C	6.5	kJ/m²	ISO 179/1eA
Charpy notched impact strength @ -30°C	6	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES [1]			
Flammability Rating, UL 94			
@ 1.5mm and 3mm thickness	HB	Class	UL Tested
Melting temperature (10 °C/min)	166	°C	ISO 11357-1/-3
Deflection temperature under load DTUL (@1.8 MPa)	104	°C	ISO 75-1&2
Coeff.of linear therm. expansion (parallel)	1.1	E-4/°C	ISO 11359-2

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

CHARACTERISTICS

SABIC® POM 90S has the following:
- High toughness and strength.
- High resistance to thermal and oxidative degradation.
- Fuel, strong alkalis and good hydrolysis resistances.