

DURACON® M90-45

Acetal (POM) Copolymer

Polyplastics Co., Ltd.

Message:

DURACON® M90-45 is a polyoxymethylene (POM) copolymer product. It can be processed by injection molding and is available in North America, Europe or the Asia-Pacific region. Typical application areas are: automotive industry.

Features include:

flame retardant/rated flame

good weather resistance

General Information			
UL YellowCard	E45034-235782		
Features	Good weather resistance		
UL File Number	E45034		
Forms	Particle		
Processing Method	Injection molding		
Part Marking Code (ISO 11469)	>POM		
Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	9.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	8.00	cm ³ /10min	ISO 1133
Water Absorption (23°C, 24 hr)	0.60	%	ISO 62
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	80		ISO 2039-2
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2700	MPa	ISO 527-2
Tensile Stress	62.0	MPa	ISO 527-2
Nominal Tensile Strain at Break	35	%	ISO 527-2
Flexural Modulus	2500	MPa	ISO 178
Flexural Stress	87.0	MPa	ISO 178
Coefficient of Friction			JIS K7218
Dynamic ¹	0.37		JIS K7218
With steel-dynamic ²	0.45		JIS K7218
Wear Factor			JIS K7218
0.49 MPa, 0.30 m/sec ³	< 1.0	10 ⁻⁸ mm ³ /N·m	JIS K7218
0.49 MPa, 0.30 m/sec ⁴	100	10 ⁻⁸ mm ³ /N·m	JIS K7218
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	6.0	kJ/m ²	ISO 179/1eA
Thermal	Nominal Value	Unit	Test Method

Heat Deflection Temperature (1.8 MPa, Unannealed)	95.0	°C	ISO 75-2/A
Linear thermal expansion coefficient			Internal method
Flow: 23 to 55°C	1.2E-4	cm/cm/°C	Internal method
Lateral: 23 to 55°C	1.2E-4	cm/cm/°C	Internal method
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	4.0E+15	ohms	IEC 60093
Volume Resistivity	4.0E+14	ohms·cm	IEC 60093
Dielectric Strength (3.00 mm)	19	kV/mm	IEC 60243-1
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94
Additional Information	Nominal Value		
Color Number	CF2001/CD9100/CD9300		
Injection	Nominal Value	Unit	
Drying Temperature	80.0 - 90.0	°C	
Drying Time	3.0 - 4.0	hr	
Processing (Melt) Temp	190 - 210	°C	
Mold Temperature	60.0 - 80.0	°C	
Injection Pressure	49.0 - 98.0	MPa	
Screw Speed	100 - 150	rpm	
Injection instructions			
Injection speed: 5-50 mm/sInjection Holding pressure: Gate sealing time + alphaCooling: Plasticizing time or ejection capable time			
NOTE			
1.	vs. M90-44, 0.06 MPa, 15 cm/s		
2.	0.49 MPa, 30 cm/s		
3.	vs C-Steel, Steel Side		
4.	vs C-Steel, Material Side		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

