

POM, Tribology

POM copolymer Injection molding grade with tribological modification for demanding applications that require prevention of audible noise caused by stick-slip phenomenon. Excellent tribological performance with low friction and low wear under various conditions of sliding against plastics and metals. Reduced emission grade. Emissions according to VDA 275 < 5 mg/kg. Material is also food contact compliant in certain countries and for certain conditions of use (contact Celanese for further information).

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988-1: POM-K | M-GNRS2 | 4-2 | - | POM copolymer

Rheological properties

See here here here here here here here h		_	
Melt volume-flow rate	13	cm ³ /10min	ISO 1133
Temperature	190	-	
Load	2.16	kg	
Moulding shrinkage, parallel	2.0	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.6	%	ISO 294-4, 2577
Typical mechanical properties			
Tensile Modulus	2700	MPa	ISO 527-1/-2
Yield stress, 50mm/min	60	MPa	ISO 527-1/-2
Yield strain, 50mm/min	13	%	ISO 527-1/-2
Nominal strain at break	40	%	ISO 527-1/-2
Flexural Modulus	2550	MPa	ISO 178
Compressive stress at 1% strain	25	MPa	ISO 604
Shear Modulus	966	MPa	ISO 6721
Charpy impact strength, 23°C	150	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	140	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	6	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	6	kJ/m²	ISO 179/1eA
Ball indentation hardness, H 358/30	140	MPa	ISO 2039-1
Thermal properties			
Melting temperature, 10°C/min	170	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa		°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	157		ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	151		ISO 306
Coeff. of linear therm. expansion, parallel		E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal		E-6/K	ISO 11359-1/-2
Ι,			



Other properties

Humidity absorption, 2mm Water absorption, 2mm Density	0.2 0.65 1400		Sim. to ISO 62 Sim. to ISO 62 ISO 1183
Injection			
Drying Temperature	100 - 120	°C	
Drying Time, Dehumidified Dryer	3 - 4	h	
Processing Moisture Content	0.15	%	
Melt Temperature Optimum	200	°C	Internal
Screw tangential speed	0.2 - 0.21	m/s	
Max. mould temperature	80 - 120	°C	
Back pressure	4	MPa	
Injection speed	slow-very slow		
Additional information			

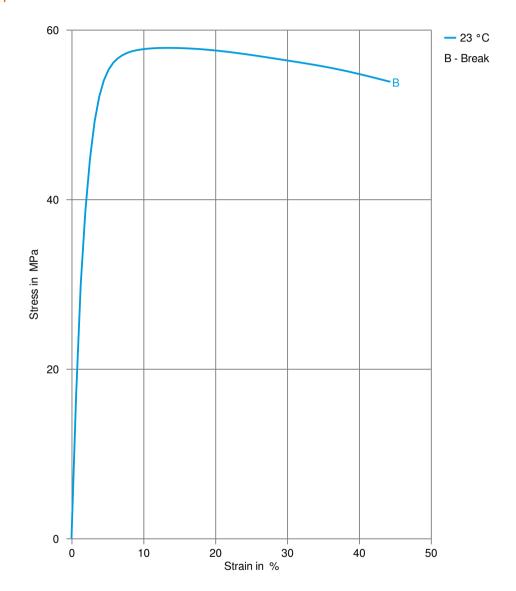
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Injection molding

See Processing Guide and Involve Celanese FTS support to obtain best quality parts

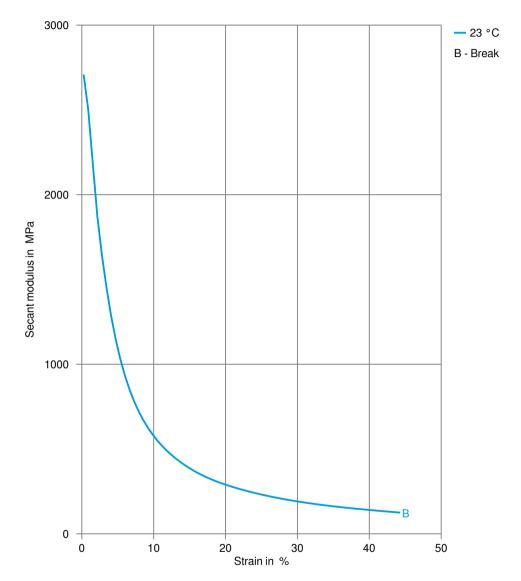


Stress-strain



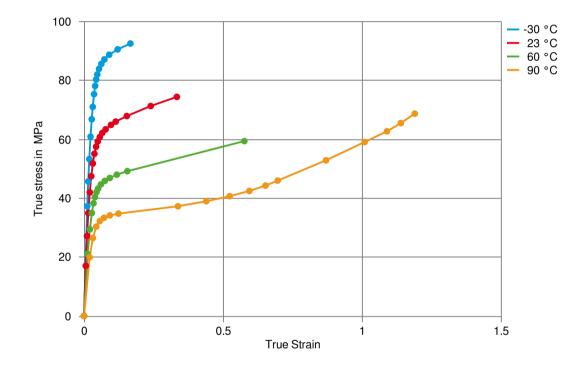


Secant modulus-strain





True stress-strain





Interior

SlideX

Black Only -Porsche-Grammer-Ros- Center Console / Arm Best-

MS237-12, Type A

TL52476

HOSTAFORM[®] SlideX[®] C0313 XAP[®]2

Processing Texts					
Pre-drying	Drying is not normally required. If material has come in contact with moisture through improper storage or handling or through regrind use, drying may be necessary to prevent splay and odor problems				
Longer pre-drying times/storage	The product can then be stored in standard conditions until processed.				
Injection molding	See Processing Guide and Involve Celanese FTS support to obtain best quality parts				
Other Approvals					
Other Approvals	OEM	Specification	Additional Information		
	Mercedes-Benz Group (Daimler)	DBL 5404	BQF		

Honda

Hyundai

VW Group

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NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colourants or other additives may cause significant variations in data values. Properties of moulded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design not intended for use in medical or dental implants. Regardless of any such product expressly identified as medical grade (including by MT® product designation or otherwise), Celanese's products are not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials the lowest that texist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users seek and achere to the m

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