



ENGLISH

Datasheet

RS Pro Acetal ID blue

RS Stock No:

Chemical Designation

POM-C (Polyacetal (Copolymer))

Colour

blue opaque

Density1.49 g/cm³**Fillers**

detectable filler

Main features

- # good slide and wear properties
- # high stiffness
- # good machinability
- # high strength
- # good chemical resistance
- # detectable via metal detector
- # difficult to bond
- # high toughness

Target**Industries** food

technology

- # mechanical engineering

Mechanical properties**parameter****value****unit****norm****comment**

Modulus of elasticity (tensile test)	1mm/min	3200	MPa	DIN EN ISO 527-2	1)	
Tensile strength	50mm/min	68	MPa	DIN EN ISO 527-2		
Tensile strength at yield	50mm/min	68	MPa	DIN EN ISO 527-2		
Elongation at yield	50mm/min	8	%	DIN EN ISO 527-2		
Elongation at break	50mm/min	10	%	DIN EN ISO 527-2		
Flexural strength	2mm/min, 10 N	100	MPa	DIN EN ISO 178	2)	
Modulus of elasticity (flexural test)	2mm/min, 10 N	3100	MPa	DIN EN ISO 178		
Compression strength	1% / 2% 5mm/min, 10 N	17 / 31	MPa	EN ISO 604	3)	
Compression modulus	5mm/min, 10 N	2400	MPa	EN ISO 604	4)	
Impact strength (Charpy)	max. 7,5J	59	kJ/m ²	DIN EN ISO 179-1eU	5)	
Notched impact strength (Charpy)	max. 7,5J	4	kJ/m ²	DIN EN ISO 179-1eA		
Ball indentation hardness		174	MPa	ISO 2039-1	6)	

Thermal properties**parameter****value****unit****norm****comment**

Glass transition temperature	-60	°C	DIN 53765	1)	
Melting temperature	169	°C	DIN 53765		
Service temperature short term	140	°C		2)	
Service temperature long term	100	°C			
Thermal expansion (CLTE)	23-60°C, long.	13	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
Thermal expansion (CLTE)	23-100°C, long.	14	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
Specific heat	1.3	J/(g*K)	ISO 22007-4:2008		
Thermal conductivity	0.39	W/(K*m)	ISO 22007-4:2008		

Electrical properties**parameter****value****unit****norm****comment**

Specific surface resistance	> 10 ¹³	Ω	DIN IEC 60093		
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Other properties**parameter****value****unit****norm****comment**

Water absorption	24h / 96h (23°C)	0.05 / 0.1	%	DIN EN ISO 62	1)	
Resistance to hot water/ bases	(+)		-		2)	
Resistance to weathering					3)	
Flammability (UL94)	corresponding to	HB		DIN IEC 60695-11-10;	4)	

- (1) Ø ca. 50mm, h=13mm
- (2) (+) limited resistance
- (3) - poor resistance
- (4) Corresponding means no listing at UL (yellow card). The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.