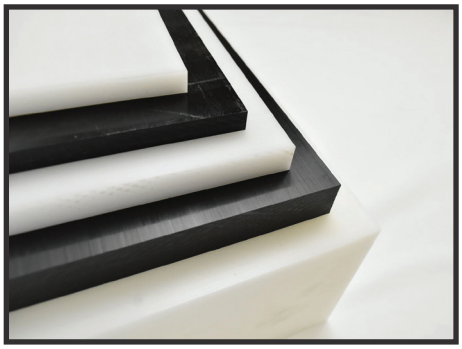
TECHNICAL DATA SHEET

Queensland Gaskets

ACETAL PLASTIC

Acetal plastic is a general-purpose, semi-crystalline, high-strength engineered thermoplastic. Commonly used for parts that need to be very stiff, have low surface friction and good dimensional stability. Good wear and tear properties especially in wet environments. Also called polyacetal and polyoxymethylene (POM).



GENERAL TECHNICAL INFORMATION

	Test method	Unit	Value
General properties			
Density	DIN EN ISO 1183-1	g/cm^3	1,41
Water absorption	DIN EN ISO 62	%	0,2
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB / HB
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	67
Elongation at break	DIN EN ISO 527	%	30
Tensile modulus of elasticity	DIN EN ISO 527	MPa	2800
Notched impact strength (charpy)	DIN EN ISO 179	kJ/m^2	6,0
Ball indentation hardness	DIN EN ISO 2039-1	MPa	150
Shore hardness	DIN EN ISO 868	scale D	81
Thermal properties			
Melting temperature	ISO 11357-3	°C	165
Thermal conductivity	DIN 52612-1	W / (m * K)	0,31
Thermal capacity	DIN 52612	kJ / (kg * K)	1,5
Coefficient of linear thermal expansion	DIN 53752	$10^{-6}K^{-1}$	110
Service temperature, long term	Average	°C	-50 ... 100
Service temperature, short term (max.)	Average	°C	140
Heat deflection temperature	DIN EN ISO 75, method A	°C	110
Electrical properties			
Dielectric constant	IEC 60250		3,8
Dielectric dissipation factor (50Hz)	IEC 60250		0,002
Volume resistivity	IEC 60093	Ω *cm	10^{13}
Surface resistivity	IEC 60093	Ω	10^{13}
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV/mm	40

APPLICATIONS

- Precision gears
- Bearings with close tolerance
- Electrical engineering insulations
- Snapfit assemblies
- Parts which operate in water up to 90 C
- Physiologically inert
- Low moisture absorption
- Continuous use at temperature 115 C

Contact us to discuss requirements and place your order 07 3277 3922

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