

TECHNICAL DATA SHEET

ACETAL (WEARACE®)

Properties	Standard	Unit	POM-C
Mechanical properties			
Density	DIN 53 479	g/cm ³	1,41
Tensile strength (short duration)	DIN 53 455	MPa	65
Modulus of elasticity in flexure (short duration)	DIN 53 457	MPa	2.9
Modulus of elasticity in tension (short duration)	DIN 53 457	MPa	3
Bending strength	DIN 53 452	MPa	115
Impact strength	DIN 53 453	kJ/m ²	n. B.
Notch impact strength	DIN 53 453	kJ/m ²	>10
Ball indentation hardness	DIN 53 456	MPa	150
H358/30			
Sliding friction coefficient (dry run) 1)	-	-	0,32
Thermal properties			
Melting temperature	-	°C	178
Coefficient of linear expansion 2)	DIN VDE 0304	10 ⁻⁵ . K ⁻¹	9-Oct
Service temperature range 3)		°C	-30 TO +100
Max.Service temperature range 4)	-	°C	140
Thermal conductivity	DIN 52 612	W/(K.m)	0,31
Moisture absorption 5) (maximum)	DIN 53 715	%	0,2
Moisture absorption 6) (saturated)	DIN 53 495	%	0,8

1) Against steel, hardened and ground P = 0.05 Mpa ; V = 0.6 m/sec ; t = 40 °C near sliding surface

2) For the temperature range from + 23°C to + 60°C

3) Empirical values with finished components without load in air, depending on type and form of heat application, long term (= months)

4) Empirical values with finished components without load in air, depending on type and form of heat application, short term (= max. 1h)

5) In normal ambient conditions 23 °C / 50 % RH

6) In water 1 MPa = 1 N/mm²; n. b. = non breaking

Applications:

- Mechanical components like gears, fan wheels, valve bodies, nuts, and screws.
- Electrical insulators, connectors, and parts for devices such as TVs and phones.
- Medical devices like insulin pens.
- Food industry parts like beverage dispenser spigots, filter housings, and food conveyor systems.

Options:

SHEET & SLAB: Natural & Black Carbon filled, Size: 2000 mm x 1000 mm, Thickness: 2 mm to 100 mm

ROLLS: Natural, Width: 1000 mm, Thickness: 0.25 mm to 1.5 mm

ROD & TUBE: Extruded Natural & Black Carbon filled, Lengths: 1000 mm & 3000 mm, Diameters: 5 mm to 45 mm

CAST: Natural & Black Carbon filled, Lengths: 1000 mm & 3000 mm, Diameters: 50 mm to 300 mm

Disclaimer:

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