



ACETAL

Acetal is widely used for:

Bearings and bushings, Pump and valve parts, Manifolds, Gears, Jigs and fixtures
Food processing and other packaging, machinery parts, wear pads, Electrical components

Performance characteristics:

Strong and stiff, Excellent machinability, Low moisture absorption, Excellent wear properties in both wet and dry environments, Low friction, Good chemical resistance

Common brands:

■ Delrin®, ■ SUSTARIN®, ■ TECAFORM®

Mechanical Properties	Parameter	Value	Unit	DIN/EN/ISO
Modulus of elasticity (tensile test)	1mm/min	2800	MPa	527-2
Tensile strength	50mm/min	67	MPa	527-2
Tensile strength at yield	50mm/min	67	MPa	527-2
Elongation at Yield	50mm/min	9	%	527-2
Elongation at break	50mm/min	32	%	527-2
Flexural strength	2mm/min 10N	91	MPa	178
Modulus of elasticity (flexural test)	2mm/min 10N	2600	MPa	178
Compression Strength	1%/2%	20/35	MPa	604
	5mm/min 10N			
Compression modulus	5mm/min 10N	2300	MPa	604
Impact strength (Charpy)	Max. 7,5J	150	kJ/m ²	179-1eU
Notched impact strength (Charpy)	Max. 7,5J	6	kJ/m ²	179-1eA
Ball indentation hardness	-	165	MPa	2039-1

Thermal Properties	Parameter	Value	Unit	DIN/EN/ISO
Glass transition temperature	-	-60	°C	53765
Melting temperature	-	166	°C	53765
Service temperature	Short term	140	°C	-
Service temperature	Long term	100	°C	-
Thermal expansion (CLTE)	23-60°C, Long	13	10 ⁻⁵ K ⁻¹	11359-1;2
Thermal expansion (CLTE)	23-100°C, Long	14	10 ⁻⁵ K ⁻¹	11359-1;2
Specific heat	-	1.4	J/(g*K)	22007-4:2008
Thermal conductivity	-	0.39	W/(K*m)	22007-4:2008

Electrical properties	Parameter	Value	Unit	DIN/IEC
Surface resistance	-	>10 ¹²	Ω	60093

Other properties	Parameter	Value	Unit	DIN/EN/ISO/IEC
Water absorption	24h/96h (23°C)	0.05/0.1	%	62
Resistance to hot water/bases	-	(+)	-	-
Resistance to weathering	-	(+)	-	-
Flammability (UL94)	Corresponding to	HB	-	60695-11-10

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