Datasheet

Material: INKUFORM-LC

EN 02/12

Properties	Symbol	Unit	Standard	Value
Information				
Material code			Internal Standard	H5W
Colour				White
Density	ρ	kg/dm³	ISO 1183	1,41
Mechanical				
Compressive modulus	Ec	MPa	DIN EN ISO 604	-
Elastic limit	σ_{el}	MPa	Internal Standard	-
Compressive stress at yield	σ_Y	MPa	DIN EN ISO 604	-
Compressive strength	σ_M	MPa	DIN EN ISO 604	-
Compressive stress at 3,5% strain	$\sigma_{3,5\%}$	MPa	DIN EN ISO 604	-
Compressive strength (0,01 h)	σ_M	MPa	Internal Standard	-
Compressive strength (100 h)	σ_M	MPa	Internal Standard	-
Compressive strength (10000 h)	σ_M	MPa	Internal Standard	-
Compressive stress at break	σ_B	MPa	DIN EN ISO 604	-
Elastic compression limit	ε_{el}	%	Internal Standard	-
Nominal compressive yield strain	ε_{cy}	%	DIN EN ISO 604	-
Nominal compressive strain at compressive strength	ε_{cM}	%	DIN EN ISO 604	-
Nominal compressive strain at break	ε_{cB}	%	DIN EN ISO 604	-
Modulus in tension (tensile modulus)	E_t	MPa	DIN EN ISO 527	2550
Elastic limit	σ_{el}	MPa	Internal Standard	-
Tensile stress at yield	σ_Y	MPa	DIN EN ISO 527	62
Tensile strength	σ_M	MPa	DIN EN ISO 527	-
Tensile stress at break	σ_B	MPa	DIN EN ISO 527	-
Elastic yield point	ε_{el}	%	Internal Standard	-
Yield strain	ε_y	%	DIN EN ISO 527	9
Elongation at maximum force	ε_M	%	DIN EN ISO 527	-
Tensile elongation at break	ε_B	%	DIN EN ISO 527	14
Modulus in flexure	E_f	MPa	DIN EN ISO 178	-
Outer fibre stress at 3,5% outer fibre strain	$\sigma_{f3,5}$	MPa	DIN EN ISO 178	-
Flexural strength	σ_{fM}	MPa	DIN EN ISO 178	-
Flexural stress at break	σ_{fB}	MPa	DIN EN ISO 178	-
Elongation at flexural yield stress	ε_M	%	DIN EN ISO 178	-
Flexural elongation at break	ε_B	%	DIN EN ISO 178	-
Creep modulus at 1% deformation after 1000h	E	N/mm²	DIN 53444	-
Stress at 1% deformation after 1000h	$\sigma_{1\%}$	N/mm²	DIN 53444	-
Creep resistance			Relative value	❹
Ball indentation hardness H358/30 (H132/30) [H49/30]	HB	N/mm²	DIN 2039	119
Shore A hardness		Shore	DIN 53505	100
Shore D hardness		Shore	DIN 53505	81
Impact strength Charpy not notched		kJ/m²	EN ISO 179/1eU	7,1
Impact strength Charpy notched		kJ/m²	EN ISO 179/1eA	6,4
Loss tangent (1Hz)	tanδ	1	Internal Standard	-
Fatigue strength at 20°C, 106 stress cycles, 1 Hz		MPa	Internal Standard	-
Thermal				
Continuous operating temperature (long term)	RTi	°C	UL 746B	80
Short term operating temperature (3 h)		°C	Internal Standard	110
Maximum RTi temperature for bushings when pressed		°C	Internal Standard	50
Melting temperature	T_m	°C	DSC	170
Glass transition temperature	T_g	°C	DSC	-70
Coefficient of thermal expansion up to 100°C	α	10^{-5}/K	ISO E 830	12
Coefficient of thermal expansion up to 150°C	α	10^{-5}/K	ISO E 831	-
Heat distortion temperature HDT/A 1,8 MPa	HDT(A)	°C	DIN EN ISO 75	105
Thermal conductivity	λ	W/(m*K)	DIN 52612	0,31
Specific heat capacity	c_p	kJ/(kg*K)	DSC	1,5
Fire behaviour (3,2mm) UL94			UL 94 HB	HB
Limiting oxygen index (LOI)	%	LOI	DIN EN ISO 4589	-

Properties	Symbol	Unit	Standard	Value
Electrical				
Volume resistivity	R_D	Ω*cm	IEC 60093	-
Surface resistance	R_O	Ω	IEC 60093	-
Penetration resistance	E	kV/mm	IEC 243	-
Tracking resistance		V	IEC 112	-
Dielectric constant (110Hz)		1	IEC 250	-
Dissipation factor (110Hz)	tanδ	1	IEC 112	-
PV values				
Max. surface pressure v=1m/min	p_{zul}	N/mm²	Internal test radial bushing	-
Max. surface pressure v=10m/min	p_{zul}	N/mm²		-
Max. surface pressure v=100m/min	p_{zul}	N/mm²		-
Max. surface pressure v=200m/min	p_{zul}	N/mm²		-
Evolution of heat with v=1m/min		°C		-
Evolution of heat with v=10m/min		°C		-
Evolution of heat with v=100m/min		°C		-
Evolution of heat with v=200m/min		°C		-
Friction				
μ static 20° C dry operation	$\mu_{stat.}$	1	Internal Standard inclined plane	0,12
μ dynamic 20° C dry operation	$\mu_{dyn.}$	1		0,10
μ dynamic 100° C dry operation	$\mu_{dyn.}$	1		0,10
Wear				
Wear factor at 20°C		mm/100 km	Internal test periodic translative movement under load	0,093
Wear factor at 100°C		mm/100 km		0,095
Wear factor at 200°C		mm/100 km		-
Wear factor at 240°C		mm/100 km		-
Available as				
Tubes (hollow rods) up to ø (de)				-
Sheets up to max. thickness				-
Rods up to ø (de)				-
Plastic granules				✓
Injection moulded parts				✓
Machined parts				-
Precision				
Dimensional stability with moisture absorption			Relative value	③
Water absorption 23°C / RMC 93%		%	DIN EN ISO 62	-
Water absorption until an equilibrium moisture content		%	DIN EN ISO 62	-
Dimensional stability with temperature variation			Relative value	⑤
High precision bushings (negative clearance)				-
Alignment adjustment			Relative value	④
Envrionmental influences				
Suitable for use in water				×
Resistance against hot water		°C		-
Resistance against dust, dirt, abrasive substances			Relative value	⑤
UV rays resistance			Relative value	-
Suitable for outdoor use			Relative value	-
Resistance to chemicals			Relative value	⑤
FDA compliant				-
Suitable for vacuum				×
Rate of desorption	a_{1h}	mbar*l/(s/cm²)		-
ROHS / WEEE				✓
Free from silicone				✓
Free from PTFE				✓
Sterilization				
Resistant against disinfectant				×
Moist heat sterilization			Relative value	×
Gamma-rays radiation sterilization			Relative value	×
Chemical sterilization			Relative value	×
UV-sterilization			Relative value	×

Wolf Kunststoff-Gleitlager GmbH
Heisenbergstr. 63-65
Industriegebiet II
50169 Kerpen-Türnich
Deutschland

E-Mail: info@zedex.de
Internet: www.zedex.de
Telefon: +49 2237 9749-0
Telefax: +49 2237 9749-20

Legend

①	Low
⑩	High
✓	Applicable
×	Not applicable
(✓)	Limited
k.Br.	No break
n.d.	Not feasible
-	Not determined
n.v.	Non-existent