



MONYT

Design Description

MONYT has proved to be an excellent choice for bearing and bushing application. Its high compression modulus owing to the glass fiber reinforcement and excellent dimensional stability is very important in it's functioning.

MONYT polymer is Hydrolysis resistant, UV resistant and has superior mineral oil compatibility as well as great resistance to ozone attack and weathering. MONYT has high load bearing capacity, which makes it a good choice for piston rings and guide ring applications. Excellent wear resistance in high pressure applications.

Features

- Outstanding toughness & abrasion for high pressure applications
- Mineral oil compatibility is good
- Good resistance to ozone attack & weathering
- Low compression set, excellent hot water resistance, resistance in HFA/HFB and HFC hydraulic fluids and in biologically reducible hydraulic fluids
- Permanently triple lubricated with Molybdenum Disulfide + Fat + Wax

Properties	Standard	Unit	Value
Hardness	DIN 53505	Shore D	82±2
Density	DIN 53479	g/cm ³	1.2
Tensile strength	DIN 53504	N/mm ²	40
Elongation at break	DIN 53504	%	95
Stress ratio 100%	DIN 53504	N/mm ²	17
Stress ratio 300%	DIN 53504	N/mm ²	38
Tear strength	DIN 53515	N/mm	222
Elastic recovery	DIN 53512	%	26
Abrasion	DIN 53516	Mg loss	160
Minimum application temperature		°C	-50
Maximum application temperature		°C	130
Elongation at break after 2000h			222
Storage in distilled water at 95°C			222
Thermal	Unit	Value	
Melting Point	°C	216	
Thermal Conductivity	W/M°C	0.25	
Specific Heat	KJ/kg°C	1.67	
Co-efficient of Linear Expansion	10 ⁶ /°	70-80	
Safe Temp- Short Period	°C	180	
Safe Temp- Continuous	°C	-150	
Heat Distortion Temp (Martens)	°C	80	



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Comparison of MONYNT with varied bearing materials

	Loading Limit kg/cm ²	Thermal Expansion 10 ⁵ c/cm/°C	Water Absorption	Friction Tests, Load = 0.86KG/CM ²		
				Temper Rise of Steel Journal After 30 mins		
				No Lubrication	Initial Lubrication	
				50 Metres/Min	50 Metres/Min	160 Metres/Min
PTFE Unfilled	50	17	0	24°C (worn)	15°C	-
HD Polyurethane	100	25	0.01	22°C (seized)	14°C	Seized
Nylon 6	200	9	9	28°C (seized)	15°C	Seized
OZ Motuf	305	5	0.4	22°C	6°C	14°C
Phosphor Bronze	800	1.8	0	38°C (worn)	20°C	69°C