



EDT "KG" TECHNICAL DATA SHEET

Chemical Acceptability for "KG" Material used for EDT polymer mounted bearing housings

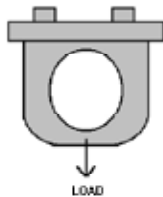
General chemical analysis is rated on the following: A Acceptable
 L Limited
 U Unacceptable

Group	Chemical Tested	Temp	Rating
Acids, strong	Concentrated hydrochloric or sulfuric acid	73° F	L
Acids, weak	Acetic acid, hydrochloric (dilute), sulfuric acid (dilute)	73° F	A
Alcohols	Methanol, ethanol, anti-freeze	73° F	A
Alkalies, strong	Strong ammonia or sodium hydroxide	73° F	L
Alkalies, weak	Dilute ammonia or sodium hydroxide	73° F	A
Chlorinated solvents	Methylene chloride, chloroform (111 trichloroethane)	73° F	U
Ethers	Diethyl ether, tetrahydrofuran	73° F	L
Hydrocarbons - Aliphatic	Gasoline, hexane, grease	73° F	A
Hydrocarbons - Aromatic	Benzene, toluene	73° F	A
Inorganic salt solutions	Sodium chloride, potassium cyanate	73° F	A
Ketone, esters	Acetone, methyl ethyl ketone	73° F	U

Tapped Base Pillow Block Thread Integrity Test

Test was conducted using EDT part number 9GC.
 Housing was mounted upside down, with bearing loaded opposite the base.

Bolt is 3/4 of threaded hole depth



Test Made	Housing Reaction
Test #1 4,000 # Max. test load	No noticeable distortion. Threads are still intact.
Test #2 766 # Continuous hanging weight test, 11 Days	Housing initially moved .001" then remained there the balance of the test. Threads are still intact.
Test #3 250 # Load dropped vertically 6-10"	Housing took 6 repeated drops before breaking. Note: Threads are still intact.

Mechanical properties of “KG” material used for EDT Polymer mounted bearing housings

Properties	ASTM Test Method	Units English (SI)	Results
PHYSICAL			
Specific gravity, 73°F (23°C)	D 792	--	1.229
Water absorption at 73°F (23°C), 24 hours	D 570	%	0.22
UV Exposure	--	--	Acceptable
MECHANICAL			
Modulus of elasticity	D 638	psi (MPa)	190,000 (1310)
Ultimate tensile strength	D 638	psi (MPa)	12,000 (83)
Elongation at yield	D 638	%	8
Flexural modulus	D 790	psi (MPa)	455,000 (3100)
Flexural strength	D 790	psi (MPa)	13,500 (93)
Notched Izod impact strength at 73°F (23°C)	D 256	ft-lb/in (J/m)	1.6 (86)
Unnotched Izod impact strength at 73°F (23°C)	D 256	ft-lb/in (J/m)	12.4 (663)
Barcol hardness	D 2583	M-943 scale	30
Rockwell hardness	D785	M scale	92
THERMAL			
D TUL at 264 psi (1.8 MPa)	D 648	°F (°C)	221 (105)
Coefficient of thermal expansion	--	in/in/°F	5.14 x 10 ⁻⁵
Maximum continuous working temperature	--	°F	150
Maximum intermittent temperature	--	°F	250
ELECTRICAL			
Volume resistivity, 73°F (23°C)	D 257	ohm-cm	4.6 x 10 ¹⁴