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 shown:
A- (Acceptable) L- (Limited) U- (Unacceptable)

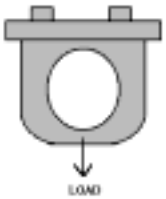
GROUP	CHEMICAL TESTED	TEMP	RATING
Acids, Strong	concentrated hydrochloric or sulfuric acid	73° F.	L
Acids, Weak	acetic acid, hydrochloric (dilute), sulfuric acid (dilute)	73° F.	A
Alcohols	methanol, ethanol, anti-freeze	73° F.	A
Alkalies, Strong	strong ammonia or sodium hydroxide	73° F.	L
Alkalies, Weak	dilute ammonia or sodium hydroxide	73° F.	A
Chlorinated Solvents	methylene chloride, chloroform (111trichloroethane)	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

Housings 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	D 785	M scale	92
THERMAL			
DTUL at 264 psi (1.8 MPa)	D 648	°F (°C)	221(105)
Coefficient of Thermal Expansion	---	in/in/F°	$5.14 X10^{-5}$
Maximum continuous working temperature	---	°F	150
Maximum intermittent temperature	---	°F	250
ELECTRICAL			
Volume resistivity, 73°F (23°C)	D 257	ohm-cm	$4.6x10^{14}$