



## Product Information

### ESC-tal™ Standard ESC Acetal Compounds

#### POM Acetal-Copolymer, Heat Stabilized, Internally Lubricated

Property			POM95-BK	POM10-C-RED	POM20-C	POM-30G
Mechanical				Value	Value	Value
Tensile Strength	ASTM D638	PSI	9,800	15,500	21,500	16,000
Tensile Elongation	ASTM D638	%	9.4	30- 4	2.0 - 3.0	2.0 - 3.0
Tensile Modulus	ASTM D638	PSI	37,700	1,250,000	2,200,000	1,400,000
Flexural Strength	ASTM D790	PSI	22,500	22,500	34,000	24,000
Flexural Modulus	ASTM D790	PSI	358,000	1,070,000	1,900,000	1,200,000
Compressive Strength	ASTM D695	PSI	9,000	14.000*	21,000	15,000*
Impact Strength						
Notched 1/8"	ASTM D256	ft-lbs/in.		1.20	1.3	1.4
Unnotched 1/8"	ASTM D256	ft-lbs/in.		10	10.5	10.0
Hardness, Rockwell	ASTM D785	R			M101	M101
Specific Gravity	ASTM D792		1.40	1.42	1.46	1.62
Water Absorption 24 hrs. @ 73 F (23 C)	ASTM D570	%	0.28	0.28	0.28	0.28
Coefficient of Friction (Dynamic)			0.20	0.05		
Coefficient of Friction (Static)			0.14			
Deflection Temperature						
@264 psi (1.8 Mpa)	ASTM D648	°F	221	275	325	325
@66 psi (0.45Mpa)	ASTM D648	°F	309			
Coefficient of Linear						
Thermal Expansion	ASTM D696	in/in/F	0.000061	0.000051	0.000012	0.000012
Shelf Life			10 years	10 years	10 years	10 years
Service Temperature Range		Degrees F	-40F to + 212F	-40F to + 212F	-40F to + 212F	-40F to + 212F
Color			BLACK	RED	BLACK	BLACK

\* Estimated by the Laboratory

The information provided in this data sheet corresponds to our knowledge on the subject at the date of this publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such materials used in combination with any other material, additives or pigments or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specifications limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to do to determine the suitability of a specific compound for your particular purpose. Since Engineered Seals, LLC cannot anticipate all variation in actual end-use conditions ESC makes no warranties and assumes no liability in connection with any use of this information. Caution: Do not use this product in medical application involving permanent implantation in the human body.

We highly recommend testing in your specific application, this is a guide only

