



**Product Information**

**ESC-thane™ P55-HT Compound for Extended Temperatures**  
**PPDI-Polyether based thermoplastic polyurethane**

Property	Test Method	Units	ESC P55-HT Value
Hardness , Shore A	ASTM D2240		53D to 55D
Hardness , Shore D	ASTM D2240		
Specific Gravity	D792		
Tensile Strength	D412	psi	6504
100% Modulus	D412	psi	
Rebound, %	ASTM 2632	%	50
Elongation at Break	D412	%	
Trouser tear	D1938	pli	
Split tear	D412	pli	
Compression Set B	ASTM D395B		
22 hours at 70°C (158° F)		%	34
70 hours at 100°C (212° F)		%	na
Flexural Modulus	ASTM D790	psi	
Rebound, Bayshore	ASTM D2632	%	50
DIN Abrasion	DIN 53516	mm3	46
Tg		°F ( °C )	-49°F (-45C)
Vicat Softening point	ASTM D1525	°F ( °C )	381°F (194°C)
Operating Temperature in oil		°F ( °C )	-50°F to +275°F
Reinforcement			NO
Color			

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.