



## PHYSICAL (MECHANICAL) PROPERTIES

TEI STYLE NO.: TE-180 DESCRIPTION: 80a ±5 NBR

MATERIAL SPEC.: \_\_\_\_\_ REV.: N/A

REQUIREMENT	QUALIFICATION VALUE	CONTROL LIMITS	TYPICAL
Hardness, ASTM D 2240, Shore A or ASTM 1415, IRHD	80	±5	81

### NORMAL PHYSICAL PROPERTIES

*ASTM D 1412 OR ASTM D 1414*

REQUIREMENT	QUALIFICATION VALUE	CONTROL LIMITS	TYPICAL
Tensile Strength, <i>psi</i>	2000 min.	N/A	2414
Tensile Stress at 50% Elongation, <i>psi</i>	N/A		
Tensile Stress at 100% Elongation, <i>psi</i>	700 min.	N/A	1122
Tensile Stress at 300% Elongation, <i>psi</i>	N/A		
Ultimate Elongation, %	175 min.	N/A	240
<u>Compression Set, ASTM D 1414 or ASTM D 395, Method B, Type 1, 70 hrs. at 212 °F (100 °C), % Original Deflection</u>	30 max.	N/A	14.6
<u>Compression Set, ASTM D 395, Method B, Type 1, 22 hrs t 158 °F, % of Original Deflection</u>	15	N/A	6.4

### API 6A RETAINED FLUID RESISTANCE

*The compound shall, within the limits below, resist the effect of ASTM #3 oil after total immersion at 212 °F for 70 hrs., per ASTM D 471*

REQUIREMENT	QUALIFICATION VALUE	CONTROL LIMITS	TYPICAL
Volume Change, %	-5 - +15	N/A	+8.8
Hardness Change, <i>Shore A or IRHD</i>	±10	N/A	-4
Tensile Strength, % Change	-10 - +20	N/A	+2.6
Ultimate Elongation, % Change	±25	N/A	-16.6
Tensile Stress, <i>Change at 100% Elongation</i>	N/A		