



PHYSICAL (MECHANICAL) PROPERTIES

TEI STYLE NO.: TE-185-H DESCRIPTION: 86a – 90a Hydrogenated NBR (HSN)
 MATERIAL SPEC.: _____ REV.: A

REQUIREMENT	QUALIFICATION VALUE	CONTROL LIMITS	TYPICAL
Hardness, ASTM D 2240, Shore A or ASTM 1415, IRHD	86a	+4 / -0	

NORMAL PHYSICAL PROPERTIES

ASTM D 1412 OR ASTM D 1414

REQUIREMENT	QUALIFICATION VALUE	CONTROL LIMITS	TYPICAL
Tensile Strength, <i>psi</i>	2800 min.	←	
Tensile Stress at 50% Elongation, <i>psi</i>	N/A	N/A	
Tensile Stress at 100% Elongation, <i>psi</i>	1750 min.	←	
Tensile Stress at 300% Elongation, <i>psi</i>	N/A	N/A	
Ultimate Elongation, %	110 min.	←	
<u>Compression Set, ASTM D 1414 or ASTM D 395, Method B, Type 1, 70 hrs. at 212 °F (100 °C), % Original Deflection</u>	N/A	N/A	
<u>Compression Set, ASTM D 395, Method B, Type 1, 22 hrs. at 158 °F, % of Original Deflection</u>	15 max.	←	

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, %	25 max.	± 25 – original	
Hardness Change, <i>Shore A or IRHD</i>	10 max.	± 10 – original	
Tensile Strength, % <i>Change</i>	30 max.	± 30 – original	
Ultimate Elongation, % <i>Change</i>	30 max.	± 30 – original	
Tensile Stress, <i>Change at 100% Elongation</i>	N/A	N/A	