



PHYSICAL (MECHANICAL) PROPERTIES

TEI STYLE NO.: TE-180-H DESCRIPTION: 75a-85a Hydrogenated NBR (HSN)

MATERIAL SPEC.: _____ REV.: None

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

NORMAL PHYSICAL PROPERTIES

ASTM D 1412 OR ASTM D 1414

REQUIREMENT	QUALIFICATION VALUE	CONTROL LIMITS	TYPICAL
Tensile Strength, <i>psi</i>	2700 min.		3641
Tensile Stress at 50% Elongation, <i>psi</i>	N/A		
Tensile Stress at 100% Elongation, <i>psi</i>	600 min.		2727
Tensile Stress at 300% Elongation, <i>psi</i>	N/A		
Ultimate Elongation, %	125 min.		130
<u>Compression Set</u> , ASTM D 1414 or ASTM D 395, Method B, Type 1, 70hrs. at 212 °F (100 °C), % Original Deflection	N/A		10.4
<u>Compression Set</u> , ASTM D 395, Method B, Type 1, 22 hrs t 212 °F, % of Original Deflection	25 max.		7.4

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, %	25 max.	±25 – Original	+8.3
Hardness Change, Shore A or IRHD	10 max.	±10 – Original	-4
Tensile Strength, % Change	35 max.	±35 – Original	-1.5
Ultimate Elongation, % Change	35 max.	±35 – Original	+17.5
Tensile Stress, Change at 100% Elongation	N/A		