



## PHYSICAL (MECHANICAL) PROPERTIES

TEI STYLE NO.: TE-190-HPX DESCRIPTION: 85a-95a Hydrogenated NBR (HSN)

MATERIAL SPEC.: \_\_\_\_\_ REV.: None

| REQUIREMENT                                       | QUALIFICATION VALUE | CONTROL LIMITS | TYPICAL |
|---|---------------------|----------------|---------|
| Hardness, ASTM D 2240, Shore A or ASTM 1415, IRHD | 90a                 | +/-5           |         |
| Specific Gravity                                  | 1.21 – 1.24         |                |         |

### NORMAL PHYSICAL PROPERTIES

*ASTM D 1412 OR ASTM D 1414*

| REQUIREMENT  | QUALIFICATION VALUE | CONTROL LIMITS | TYPICAL |
|--|---------------------|----------------|---------|
| Tensile Strength, <i>psi</i>   | 3000 min.           |                |         |
| Tensile Stress at 50% Elongation, <i>psi</i>   | N/A                 |                |         |
| Tensile Stress at 100% Elongation, <i>psi</i>  | 2200 min.           |                |         |
| Tensile Stress at 300% Elongation, <i>psi</i>  | N/A                 |                |         |
| Ultimate Elongation, %   | 100 min.            |                |         |
| <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                 |                |         |
| <u>Compression Set</u> , ASTM D 395, Method B, Type 1, 22 hrs t 212 °F, % of Original Deflection                       | 20 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, %                          | 20 max.             | ±20 – Original |         |
| Hardness Change, Shore A or IRHD          | 8 max.              | ±8 – Original  |         |
| Tensile Strength, % Change                | 15 max.             | ±15 – Original |         |
| Ultimate Elongation, % Change             | 25 max.             | ±25 – Original |         |
| Tensile Stress, Change at 100% Elongation | N/A                 |                |         |