Product Data Sheet

# EnDura® V91J

High performance versatile terpolymer fluoroelastomer for the oilfield industry

## Description

Recognising the demanding challenges in the oil and gas exploration and extraction industry, PPE has developed the most technically advanced range of elastomer materials to meet the needs of sealing applications operating in the most severe conditions.

The EnDura® range of elite materials has been specifically formulated for Explosive Decompression (ED) resistance in downhole, surface and subsea oilfield equipment.

EnDura® V91J provides outstanding mechanical strength and high pressure performance.

## Key Attributes

- Excellent Explosive Decompression resistance
- Tested to Norsok M-710 standard
- Tested to Total specification GS PVV 142 03/01
- Tested to NACE standards: TM0297 (ED) & TM0187 (Sour Gas)
- Wide resistance to oilfield chemicals
- Versatile material with good compression set characteristics providing excellent sealing properties

## Typical Applications

Low temperature and high pressure environments
Exploration and drilling equipment
Completion equipment
Subsea valves and pumps
Compressors
Blow-out preventors (BOPs)
Feed throughs
O-rings, T-section seals, special profiles and custom-made seals

## Other materials in this range

EnDura® V91A ( -46°C / -51°F)
EnDura® V91K ( -35°C / -31°F)
EnDura® Z95X (HNBR )
EnDura® A90H (TFE/P )

Tested to **NORSOK M-710**

Tested to **TOTAL** GS PVV 142 03/01

Tested to **NACE** TM0297 & TM0187

## Typical Material Properties

| Property | ASTM | ISO | Value |
|---|---|---|---|
| Material Type | FKM | FPM | Terpolymer |
| Colour | | | Black |
| Hardness: (°IRHD) | D1415 | ISO48 | 90 |
| Tensile Strength (MPa) | D412 | ISO37 | 24 |
| Elongation at break (%) | D412 | ISO37 | 210 |
| Modulus @ 50% (MPa) | | | 5.5 |
| Modulus @ 100% (MPa) | | | 11.0 |
| Compression Set: 24 hrs @ 200°C (392°F) | D395 | ISO815 | 24% |
| TR10 | D1329 | | -12°C (10°F) |
| Minimum Operating Temperature | | | -17°C (-1°F) |
| Maximum Operating Temperature | | | +225°C (+437°F) |

***SPECIAL NOTE:*** *This information is to the best of our knowledge accurate and reliable. However, Precision Polymer Engineering Ltd makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use, especially in applications where their failure may result in injury and/or damage. It should also be noted that all elastomeric parts have a finite life. Therefore a regular programme of inspection and replacement is strongly recommended.*
*The material properties above should not to be used for specification purposes.*