

EnDura[®] Z85L

Low temperature hydrogenated nitrile rubber for the oilfield industry



Description

EnDura[®] Z85L is a peroxide-cured, HNBR compound specially developed for service in low temperature applications.

The high mechanical strength of Z85L provides excellent wear and abrasion resistant properties when used in dynamic applications.

Its broad chemical resistance makes Z85L ideal for use with sour gas (H₂S), crude oil, carbon dioxide and operating fluids including lubricators, drilling mud, oil additives and amine corrosion inhibitors.

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

Key Attributes

- ▶ Good explosive decompression resistance
- ▶ Tested to **NACE TM0297** (ED) standard
- ▶ Outstanding low temperature performance
- ▶ Excellent chemical resistance
- ▶ Superior H₂S resistance compared with standard HNBR
- ▶ High mechanical strength

Typical Applications

Low temperature and high pressure environments
 Exploration and drilling equipment
 Cementing and completion equipment
 Subsea valves and pumps

Other materials for oilfield applications

EnDura[®] range of ED resistant elastomers

Perlast[®] perfluoroelastomer (FFKM)

V97D - Shell tested ED resistant fluoroelastomer (FKM)

V95X - General purpose co-polymer fluoroelastomer (FKM)



Typical Material Properties

Property	ASTM	ISO	Value
Material Type	HNBR	HNBR	Low ACN
Colour			Black
Hardness: (°IRHD)	D1415	ISO48	85
Tensile Strength (MPa)	D412	ISO37	18.3
Elongation at break (%)	D412	ISO37	195
Compression Set: 24 hrs @ 150°C (302°F)	D395	ISO815	21%
Modulus @ 50% (MPa)			5.5
Modulus @ 100% (MPa)			16.0
Heat Resistance: 70 hrs @ 150°C (302°F)	D573	ISO188	24%
Hardness change (°IRHD)	D1415	ISO48	+9
Tensile strength change (%)	D412	ISO37	+10
Elongation at break change (%)	D412	ISO37	-15
TR10	D1329		-46°C (-51°F)
Minimum Operating Temperature			-50°C (-58°F)
Maximum Operating Temperature			+160°C (+320°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 be used for specification purposes.



Quotation's and Order's you can send to: sales@oring.su
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