

MATERIAL TEST DATA

TRP COMPOUND REFERENCE
N°: HN114 (page 1 of 2)

Polymer Type: Norsok M-710 Certified
Hydrogenated Nitrile (HNBR)

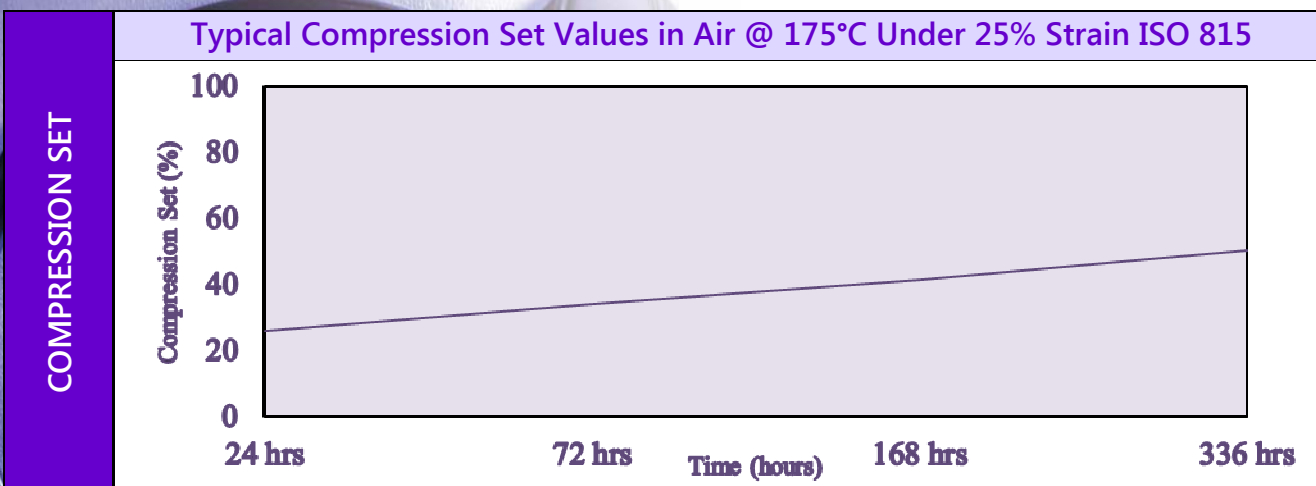


Description

This HNBR compound is designed to give the best performance for rapid gas decompression (RGD) resistance and is certified to the NORSOK M-710 Rev 2 standard. It has excellent physical properties for a compound with such a high hardness. Hydrogenated Nitrile rubber offers high levels of

oil and heat resistance. It can be used where temperatures are too high for standard Nitrile, but not sufficiently high to use Fluorocarbon rubber. **Service Temperature -20°C (+4°F) to +150°C (+300°F).**

TYPICAL PHYSICAL PROPERTIES	Property	Typical Values	Test Standard
	Colour	Black	
	Hardness (°IRHD)	91	ISO 48
	Tensile Strength (MPa)	19.6	ISO 37
	Modulus @ 100% (MPa)	13.2	ISO 37
	Elongation @ Break (%)	224	ISO 37
	Tear Strength (N/mm)	38.1	ISO 34
	Specific Gravity (g/cm ³)	1.26	ISO 2781



NORSOK	NORSOK M710 (Rev. 2, October 2001) in respect of rapid gas decompression resistance in 10% Carbon Dioxide at 150 bar and 100°C		
	Compound	Summary Rating (Average of three)	Result
	HN114	1100	Pass

OIL & GAS INDUSTRY / RGD RESISTANT

MATERIAL TEST DATA

TRP COMPOUND REFERENCE N^o: HN114 (page 2 of 2)

Polymer Type: Norsok M-710 Certified Hydrogenated Nitrile (HNBR)

OIL & GAS INDUSTRY / RGD RESISTANT

AIR-AGEING	Property (after 168 hours @ 175°C)		Typical Values	Test Standard
	Hardness Change (°IRHD)		+3	ISO 188
	Tensile Change (%)		+15.9	ISO 188
	Elongation Change (%)		-32.6	ISO 188
	Property (after 336 hours @ 175°C)		Typical Values	Test Standard
	Hardness Change (°IRHD)		+5	ISO 188
	Tensile Change (%)		+18.9	ISO 188
Elongation Change (%)		-46.8	ISO 188	

ABSORPTION TEST	Property (after 168 hours @ 100°C)		Typical Values	Test Standard
	IRM 901 OIL			
	Volume Change (%)		0.90	ISO 1817
	Hardness Change (°IRHD)		-1	
	IRM 903 OIL			
	Volume Change (%)		16.18	ISO 1817
	Hardness Change (°IRHD)		-15	

The properties given on this data sheet is derived from tests carried out by TRP Polymer Solutions Ltd. They should not be regarded as specifications, but only as typical properties of the material described. It is intended for use by persons having technical skills and understanding of the seal and gasket design. Since the conditions of use are outside our control, nor have we designed the product shape, we can make no warranties, express or implied and assume no liability in connection with any use of this information.

Data Sheet	Page	Issue Date	Issue No.	Issue By
MD	2 OF 2	14.12.10	1	GV