MATERIAL TEST DATA

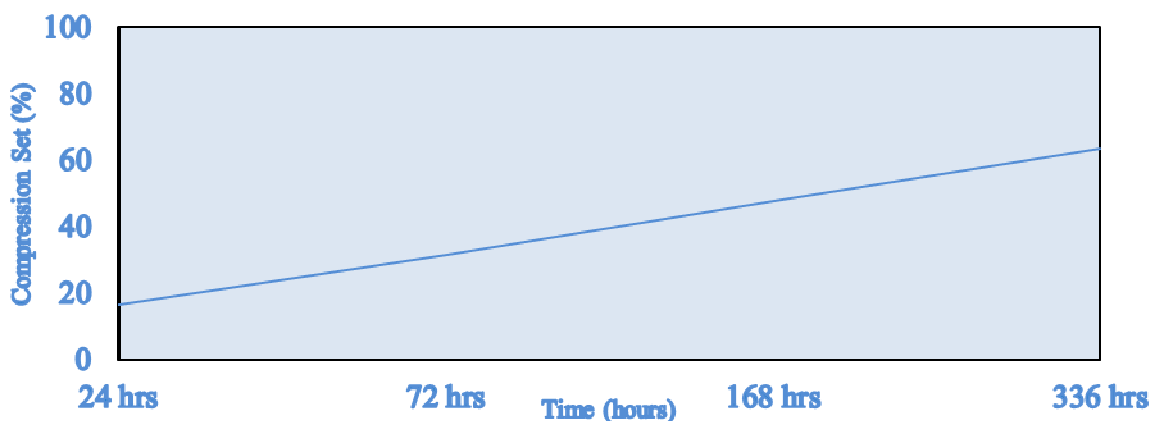## Polymer Type: Acrylonitrile Butadiene (Nitrile)

Description

This 65-75 IRHD (hardness) material is formulated with a low Nitrile polymer which allows a low temperature performance of -40°C (-40°F). It is not recommended for use in aromatic hydrocarbons or temperatures above +100°C (+212°F).

Formulation complies with FDA 21 CFR 177-2600e.

TYPICAL PHYSICAL PROPERTIES

Property	Typical Values	Test Standard
Colour	Black	
Hardness (°IRHD)	70	ISO 48
Tensile Strength (MPa)	15.39	ISO 37
Modulus @ 100% (MPa)	6.35	ISO 37
Elongation @ Break (%)	226	ISO 37
Tear Strength (N/mm)	68.71	ISO 34
Specific Gravity (g/cm³)	1.20	ISO 2781

COMPRESSION SET

Typical Compression Set Values in Air @ 100°C Under 25% Strain ISO 815

Compression Set (%) vs Time (hours)

y-axis: Compression Set (%): 0, 20, 40, 60, 80, 100

x-axis: Time (hours): 24 hrs, 72 hrs, 168 hrs, 336 hrs

ULTRA LOW TEMPERATURE DYNAMIC SEALING

MATERIAL TEST DATA

Polymer Type: Acrylonitrile Butadiene (Nitrile)

AIR-AGEING

Property (after 168 hours @ 100°C)	Typical Values	Test Standard
Hardness Change (°IRHD)	+8	ISO 188
Tensile Change (%)	+0.58	ISO 188
Elongation Change (%)	-26.97	ISO 188
Property (after 336 hours @ 100°C)	Typical Values	Test Standard
Hardness Change (°IRHD)	+11	ISO 188
Tensile Change (%)	+0.58	ISO 188
Elongation Change (%)	-45.71	ISO 188

ABSORPTION TEST

Property (after 168 hours @ 100°C)	Typical Values	Test Standard
IRM 901 OIL		
Volume Change (%)	+4.51	ISO 1817
Hardness Change (°IRHD)	+1	
IRM 903 OIL		
Volume Change (%)	+38.49	ISO 1817
Hardness Change (°IRHD)	-15	

ULTRA LOW TEMPERATURE DYNAMIC SEALING

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