

MATERIAL TEST DATA

TRP COMPOUND REFERENCE
N°: S227 (page 1 of 2)

Polymer Type: Ultra Low Temperature
Silicone



Description

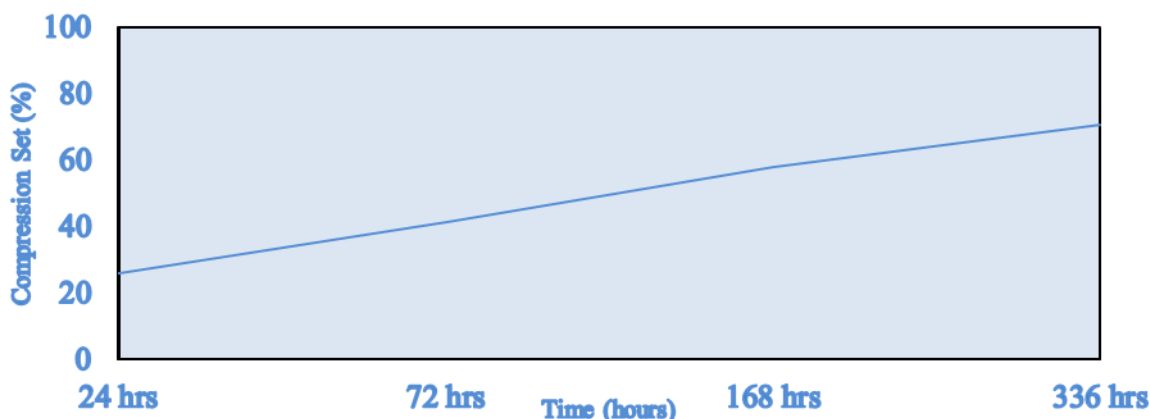
This red ultra-low temperature material is suitable for a wide range of chemical processes and extreme environmental applications. It has an excellent resistance to Ozone and weathering and can operate at temperatures from -70°C (-94°F) to +200°C (+392°F).

When used in applications involving moisture, a maximum temperature of +120°C (+248°F) is recommended.

TYPICAL PHYSICAL PROPERTIES	Property	Typical Values	Test Standard
	Colour	Red	
	Hardness (°IRHD)	70	ISO 48
	Tensile Strength (MPa)	8.82	ISO 37
	Modulus @ 100% (MPa)	2.32	ISO 37
	Elongation @ Break (%)	470	ISO 37
	Tear Strength (N/mm)	29.73	ISO 34
	Specific Gravity (g/cm ³)	1.23	ISO 2781

Typical Compression Set Values in Air @ 175°C Under 25% Strain ISO 815

COMPRESSION SET



ULTRA LOW TEMPERATURE DYNAMIC SEALING

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ULTRA LOW TEMPERATURE DYNAMIC SEALING

AIR-AGEING	Property (after 168 hours @ 175°C)	Typical Values	Test Standard
	Hardness Change (°IRHD)	+4	ISO 188
	Tensile Change (%)	-6.21	ISO 188
	Elongation Change (%)	-37.20	ISO 188
	Property (after 336 hours @ 175°C)	Typical Values	Test Standard
	Hardness Change (°IRHD)	+10	ISO 188
	Elongation Change (%)	-49.30	ISO 188

ABSORPTION TEST	Property (after 168 hours @ 100°C)	Typical Values	Test Standard
	IRM 901 OIL		
	Volume Change (%)	+4.65	ISO 1817
	Hardness Change (°IRHD)	+1	
	IRM 903 OIL		
	Volume Change (%)	+45.86	ISO 1817
	Hardness Change (°IRHD)	-29	
	DISTILLED WATER		
	Volume Change (%)	-0.14	ISO 1817
	Hardness Change (°IRHD)	+8	

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.

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