

## Product description:

KINB17 ISM HNBR AED is an hydrogenated nitrile compound specifically crafted for the resistance of RIGID GAS DECOMPRESSION. The condition is the internal failure of products due to sudden release of pressure which causes the trapped air in products to expand and cause damage.

## Chemistry:

The compound shows higher strength, greater resistance to swelling by hydrocarbon oils, and lower permeability to gases. Hydrogenation reduces the reactive activity of butadiene unsaturation with environment.

## Properties:

Excellent mechanical strength at elevated temperatures and oil resistance compared to general purpose nitrile elastomers. Better ozone due to the saturation and fair low temperature flexibility due to high ACN content.

## Applications:

In places of high pressure gas/fluid combinations and balanced properties of fluid exposure resistivity, high gas pressure and low temperature withstanding abilities are needed

## Service temperature:

-20 °C to 160 °C

## Product ranges:

O-Ring seals, Backup rings.

## Physical properties:

S.No	Physical Properties at Room Temperature	Test Method	Specification
1	Hardness Shore A	ASTM D 2240	90±5
2	Density	ASTM D 792	1.27±0.05
3	Tensile Strength, MPa (Min)	ASTM D 412	20
4	Elongation At Break % (Min)		100
5	Modulus @ 100% MPa (Min)		12
6	Compression Set 22hrs@150°C,% Max	ASTM D 395	25
	Compression Set 70hrs@150°C,% Max	Method B	35
7	Heat Ageing ( 70hrs @ 150°C )		
	Hardness change Shore A	ASTM D 573	±10
	Tensile change % (Max)		-25
	Elongation change% (Max)		-30
8	Oil ageing resistance ASTM OIL No.1 ( 70hrs @ 150°C )		
	Hardness change Shore A	ASTM D 471	-5 to +10
	Tensile change % (Max)		-20
	Elongation change% (Max)		-30
	Volume change %		±5
9	Oil ageing resistance ASTM OIL No.3 ( 70hrs @ 150°C )		
	Hardness change Shore A	ASTM D 471	-15
	Tensile change % (Max)		-40
	Elongation change% (Max)		-40
	Volume change % (Max)		+25

**NOTE: The Above Compound Meets As Per ASTM D2000 M2 DH 920 A26 B16 B36 EO16 EO36.**

*The technical datasheets are derived on the basis of the service conditions and end user preference in which the values derived are given over a range of specifications which are cross checked over a variety of trials and approved with the end user conditions and calculated over a prolonged time*



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