

O-rings in compound

KINB17 HNBR AED -46°C

supplied by

**Industrial Spares Manufacturing & Trading Company
(ISMAT)**

have been tested according to the requirements of

**NORSOK M-710 Edition 3 and ISO 23936-2
(Rapid gas decompression resistance)**

PASSED

Test gas:	90/10 mol% CH ₄ / CO ₂
Test temperature:	100 ±2 °C
Test pressure:	150 bar (15 MPa)
Number of cycles:	8
Decompression rate:	19.8 bar/minute
Seal Size:	312 (ISO 3601-1/AS 568)

Keyur Somani

Senior Scientist

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Date


Element Hitchin has been assessed to BS EN ISO 9001 by the British Standards Institution (BSI) and is a registered firm under the BSI Quality Assurance scheme for the provision of professional and technical services.



Element Materials Technology

Wilbury Way, Hitchin, Hertfordshire, SG4 0TW, United Kingdom. T: +44 (0) 1462 427850 F: +44 (0) 1462 427851
info.hitchin@element.com www.element.com

Element Hitchin verify that O-rings in compound **KINB17** supplied by Industrial Spares Manufacturing & Trading Company have been subjected to a multi-cycle RGD test under the conditions detailed below.

RGD TEST COMMISSIONED BY		
ISMAT, 66&77 Functional Developed Plots, Perungudi, Chennai-600096, INDIA		
SEAL COMPOUND DETAILS		
Seal Manufacture	Industrial Spares Manufacturing & Trading Company	
Supplied by	Industrial Spares Manufacturing & Trading Company	
Compound name/number/reference	KINB17	
Elastomer type to ASTM D1418	HNBR AED -46°C	
Lot/Batch No.	Not disclosed	
Seal type	O-ring	
Manufacturing method	Not disclosed	
Seal size (ISO3601-1/AS 568)	312	
CSD (nominal)	mm	5.33
Mean CSD (actual, radial)	mm	5.31
RGD TEST CONDITIONS		
Temperature	°C	100 ±2
Pressure	MPa (bar)	15 +2/-0 (150 +10/-5)
No. of cycles		8
Dwell between cycles	hour	1
Decompression rate (average)	MPa/min (bar/minute)	2.0 (20)
Gas type	mol %	90/10 CH ₄ /CO ₂
SEAL HOUSING DETAILS CONDITIONS		
Seal compression direction	Radial	
Groove ID	mm	25.4
Groove OD	mm	16.0
Groove width	mm	5.67
Squeeze (average)	%	11.1
Groove fill (area basis)	%	83
Number of seals tested	4	
ISO TEST SEAL RATINGS		
SEAL REPLICATE	RATING	PASS/FAIL
1	1111	Pass
2	1111	Pass
3	1111	Pass
4	1111	Pass
OVERALL RATING	PASS	
GENERAL		
Test laboratory	Element Materials Technology, Hitchin, U.K.	
Test date	29 th March – 9 th April 2018	
Test gas certified and available	YES/NO	YES
Transducer calibration available	YES/NO	YES
P/T log available	YES/NO	YES
TEST LABORATORY STAMP/SIGNATURE	 Element Hitchin, UK	

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