

# MATERIAL DATA SHEET

## PVC / NITRILE / NYLON INSERTION SHEET C/W FABRIC IMPRESSION ON BOTH SIDES QUALITY : PVNN24

1. **GENERAL** - This specification covers requirement that shall be met by the casing of Floating Roof Tank Seals

### 2. PHYSICAL PROPERTIES

2.1 The casing material shall be oil, water and weather resistant.

2.2 The material of the casing shall be Nylon Fabric with PVC Nitrile Butadiene compound coating on either side.

2.3 **Physical Properties of the Compound:** ( N.B. Tested on 2mm Thickness Rubber Sheet as per IS3400)

PROPERTY	VALUE
Hardness	75° (IRHD)
Specific Gravity	1.21 (g/cc)
Tensile Strength	13.5 (Mpa)
Elongation @ break	250 (%)
Compression set - 24 hours @ 70°C	30.0 (%)
Angle tear strength	33.0 (N/mm)
Surface Resistivity .BS 903 Pt C1	2.7x10 <sup>7</sup> (Ohms)
Low Temperature Resistance: 5 hours at -20°C, 180° bend	No cracks
<u>Immersion fuel B* 7 days at 40°C</u> Hardness change	-13 (IRHD)
Tensile	8.3 (Mpa)
Elongation	205 (%)
Volume	14.6 (%)
Drying 4 days at 40°C	-11.5 (%)
Ozone resistance 72 hours At 40°C / 50pphm	No cracks

P.T.O. ....



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## 2.4 Physical Properties of the Nylon Fabric:

PROPERTY	VALUE
Thickness of the Nylon Fabric	0.5mm (+/-0.1)
Breaking Strength / 5cm Along Warp (min) Along Weft (min)	150Kg 135Kg
Nylon Fabric Weight	135grms / sq. m

## 3. TEST TO BE PERFORMED ON THE CASING OF THE MATERIAL ( END PRODUCT )

### 3.1 Volumetric Swelling Test:

Maximum Volumetric Variation after immersion in solvent at ambient temperature shall be limited to the following:-

POLYMER:		PVC NITIRLE	
SOLVENT		48 Hours	10 Days
A	In a mixture containing 70% Aromatic	38%	48%
B	In a mixture containing 30% Aromatic	20%	22%
C	In Isooctane Fuel ASTM A	5%	5%
D	In Water	8%	10%

### CLIENT REFERENCES:

- MB Engineering Services Ltd – Scotland
- Land & Marine (McTay Tank Seals)
- ISC Seals
- N P Manufacturing
- Bridge & Roof
- Indian Tube Mill
- Artson Engineering
- Nicco Corp

### + CONTRACTORS

- Hindustan Petroleum Corporation Ltd
- Bharat Petroleum Corporation Ltd
- Indian Oil Corporation Ltd
- Reliance Petroleum
- Cochin Refineries
- Chennai Refinery

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