TECHNICAL DATA SHEET

Queensland Gaskets

TD1120 | CORK/RUBBER SHEET

TD1120 sealing material is compounded with a special Nitrile (NBR) rubber. This product is suitable for most transformer oils and high distortion flanges at application temperatures.

TECHNICAL INFORMATION

- **Temperature range** ..... -40°C to 125°C (-40° F to 257°F)
- **Stress range** ..... 2.5 to 15 MPa (360 to 2175 psi)
- **Compressive Strength** ... exceeds 70 MPa (10000 psi)

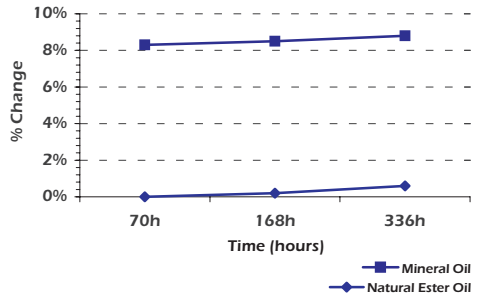
TD1120 conforms to all present regulations for hazardous substances.

- Asbestos Free
- Heavy Metals (Pb, Cd, Hg and Cr(VI)) Free
- Polycyclic Aromatic Hydrocarbons (PAH) Free

PROPERTIES

OIL AGEING DATA(1)

VOLUME CHANGE 336h @ 125°C

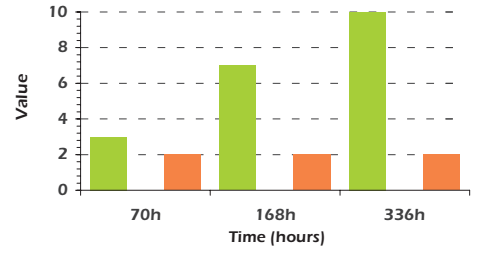


(*) **PROPERTIES CHANGE 504h @ 125°C**

Hardness Change (Shore A)..... -2
Flexibility..... 3

(1) ASTM F146

HEAT AGEING DATA, AIR @ 125°C(2&3)



(2) ASTM D2240
(3) ASTM F147

Density (kg/m³)[1]	850
Hardness (Shore A)[2]	65
Tensile Strength (MPa)[3]	2,0
Elongation (%)[3]	90

(1) ASTM D297
(2) ASTM D2240
(3) ASTM D412, Die C

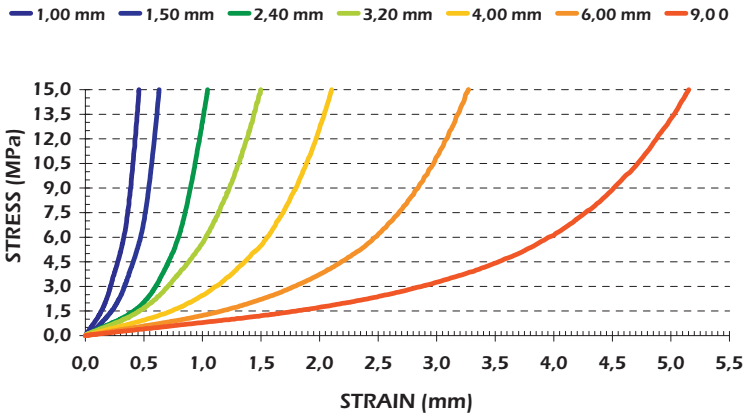
TD1120 is suited for Mineral and Silicone oil according to:
ASTM D3455 - Test Methods for Compatibility of Construction Materials with Electrical Insulating Oil of Petroleum origin.
ASTM D5282 - Test Methods for Compatibility of Construction Materials with Silicone Fluid used for Electrical Insulation.

Fluid Contact	
Mineral Oil	Suitable
Natural Ester Oil	Suitable
Silicone Oil	Suitable
SF_6 Gas	Acceptable

Contact us to discuss requirements and place your order 07 3277 3922

All information and data quoted has been provided by our suppliers and is based upon years of experience in the production and operation of sealing elements. This data may not be used to support any warranty claims. With its publication this latest edition supersedes all previous issues and is subject to change without further notice.

TECHNICAL DATA

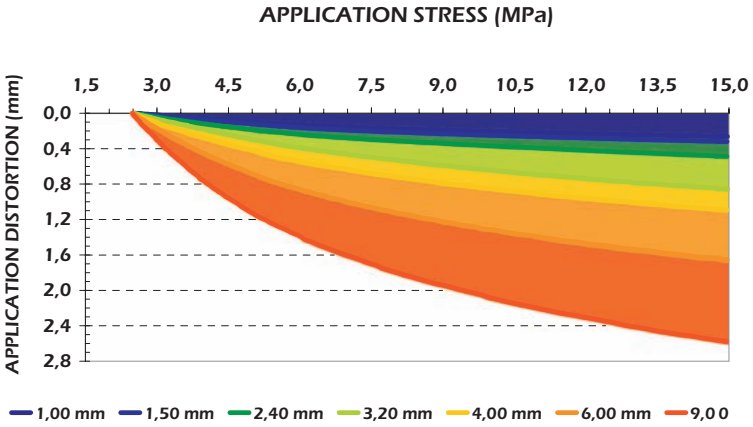


Sealing Stress

A Load Deflection (LD) curve is a Stress (MPa) vs. Strain (mm) curve. It is the load required to compress a material at a defined thickness a determined deflection.

It is very useful when making material selections to meet engineering requirements such as flange load or controlled compression applications.

If you require LD data at a different thickness, just ask us.



System Distortion

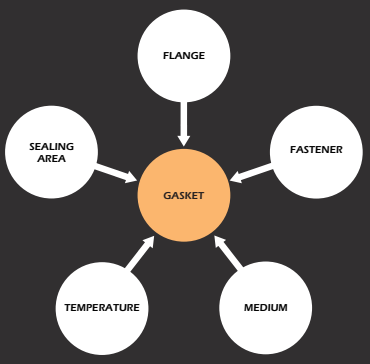
Conformability is the ability of a gasket material to conform to flange surface roughness and out-of-flatness.

At a given sealing stress a corresponding maximum allowable flange distortion assures that a "positive seal" is guaranteed for a defined material thickness.

Intersecting the hardware distortion and the respective sealing stress, a suggested material thickness is selected. However it is always recommended to validate the material thickness in your system due to unexpected flange distortion behavior.

A Gasket material suitability is defined by a variety of application factors shown in the adjacent diagram. The common perception that temperature and chemical resistance must be assured are only part of the equation. Amorim Cork Composites systems approach ensures joint integrity by considering the multiple variables that are involved.

Sealing Stress and System Distortion are key characteristics that influence each other. Sealing Stress is defined by the total fastener loading for a given gasket contact area. System Distortion is a function of the hardware manufacturing process and assembly procedure or loading. The selection of the gasket thickness depends on these two factors.



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