Product information

REV2013344

TEADIT TF 1590

Description:

TEADIT **TF 1590** is a structured PTFE - Gasket - Sheet manufactured by a unique process which provides a high level of fibrillation to overcome the creep relaxation and cold flow problems associated with normal (skived or moulded) PTFE sheets. TEADIT **TF1590** is produced from virgin PTFE resin filled with Silica.

Advantages:

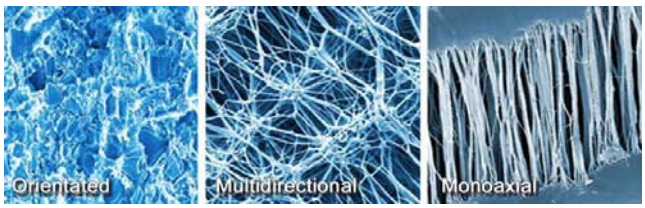
- It is suitable for services with high pressures and temperature, especially in chemical processing and hydrocarbon plants in strong acids (except hydrofluoric), solvents, hydrocarbons, water, steam, and chlorine.
- TEADIT **TF 1590** is quick and simple to install. The used gasket can be removed easily and without residue.

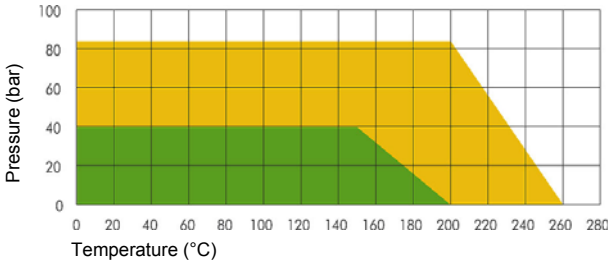
Properties:

- Colour: fawn
- Size: Sheets of 1500 mm x 1500 mm
- Thickness: 0,5mm up to 3.2mm
- Temperature: -210ºC to +260ºC
- Chemical resistance: chemically inert against all substances (pH 0-14), including the most aggressive acids and moderate lyes. It is not suitable for molten alkali metals and elemental fluorine at high temperature and pressure.
- Operating Pressure: max. 83 bar
- Ageing: TEADIT **TF 1590** is not subject to ageing or weathering. It can be stored indefinitely.
- Safety: TEADIT **TF 1590** complies to FDA requirements for food, is physiologically harmless and suitable for oxygen applications.

Approvals:

- TA Luft
- Blow-Out-Test
- FDA
- EU 1935/2004
- Germanischer Lloyd Approval
- DVGW
- BAM and Air Liquide (Oxygen)
- KTW





P x T diagramm:

The P x T diagram above indicates the service limits considering the simultaneous influence of pressure and temperature (chemical suitability assumed). The green area represents the normal service limits, while the orange coloured area shows the maximum application limits.

TEADIT TF 1590			
property	**test method**	**nominal value**	**parameters**
density [g/cm^3]	ASTM D 792	2.1	
compressibility [%]	ASTM F 36	10	σ = 34 MPa
recovery [%]	ASTM F 36	40	σ = 34 MPa
compressibility ε KSW [%]	DIN 28090 - 2	6	σ = 20 MPa
recovery ε KRW [%]	DIN 28090 - 2	2.2	σ = 20 MPa
tensile strength [MPa]	ASTM 152	14	room temperature
creep deformation [%]	ASTM F38	18	
stress retention [MPa]	DIN 52913	13	30 N/mm^2 ,150°C,16h
sealability [ml/h]	ASTM F 37	0.2	0.7 bar
Q min 0,01 [MPa]	EN 13555	21	HE 40 bar
Q smin 0,01 [MPa]	EN 13555	< 10	HE 40 bar
Q min 0,001 [MPa]	EN 13555	29	HE 40 bar
Q smin 0,001 [MPa]	EN 13555	< 10	HE 40 bar
Q smax [MPa]	EN 13555	> 240	room temperature
sealability [mg / s • m]	DIN 3535	< 0.015	N_2, 40 bar, 32 MPa
specific leakage rate L [mbar • l / (s • m)]	VDI 2440 / TA LUFT	1.1 • 10^{-6}	He,1 bar, 30 MPa