# Product information

REV2013344

# TEADIT TF 1570

## Description:

TEADIT **TF 1570** 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 **TF 1570** is produced from virgin PTFE resin filled with hollow glass micro spheres.

## Advantages:

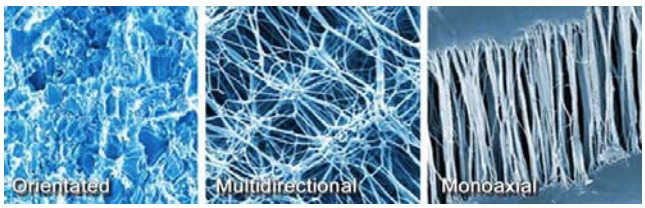
- TEADIT **TF 1570** is suitable for service with a wide variety of aggressive fluids, including hydrocarbons, acids and caustics, solvents, water, steam, hydrogen-peroxide, refrigerants, etc.
- The high compressibility of TEADIT **TF 1570** makes it particularly suitable for use with stress sensitive and/or fragile flanged joints, e.g. glass, ceramics, plastic, etc.
- The excellent malleability of TEADIT **TF 1570** makes repairing of small damages and/or irregularities of the sealing area (flange surface) unnecessary.
- TEADIT **TF 1570 i**s quick and simple to install. The used gasket can be removed easily and without residue.

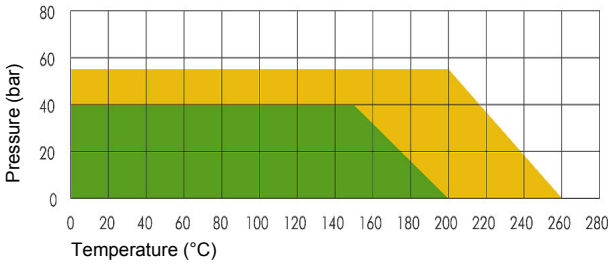
## Properties:

- Colour: blue
- 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 lyes. It is not recommended for strong caustic service above 80°C. It must not be used in contact with molten alkali metals and elemental fluorine at high temperature and pressure.
- Operating Pressure: 55 bar
- Ageing: TEADIT **TF 1570 i**s not subject to ageing or weathering. It can be stored indefinitely.

## Approvals:

- TA Luft
- Blow-Out-Test
- FDA
- Germanischer Lloyd Approval
- BAM (Oxygen)


## 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 1570 | | | |
|---|---|---|---|
| **property** | **test method** | **nominal value** | **parameters** |
| density [g/cm$^3$] | ASTM D 792 | 1.7 | |
| compressibility [%] | ASTM F 36 | 35 | σ = 34 MPa |
| recovery [%] | ASTM F 36 | 30 | σ = 34 MPa |
| compressibility ε KSW [%] | DIN 28090 - 2 | 29 | σ = 20 MPa |
| recovery ε KRW [%] | DIN 28090 - 2 | 7.4 | σ = 20 MPa |
| tensile strength [MPa] | ASTM 152 | 14 | room temperature |
| creep deformation [%] | ASTM F38 | 40 | |
| stress retention [MPa] | DIN 52913 | 12 | 30 N/mm$^2$ ,150°C,16h |
| sealability [ml/h] | ASTM F 37 | 0.12 | 0.7 bar |
| Q min 0,01 [MPa] | EN 13555 | < 10 | HE 40 bar |
| Q smin 0,01 [MPa] | EN 13555 | < 10 | HE 40 bar |
| Q min 0,001 [MPa] | EN 13555 | 16 | 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 | 3.7 • 10$^{-6}$ | He,1 bar, 30 MPa |



TEADIT INT. - Rosenheimer Str. 10, 6330 Kufstein, AUSTRIA, Tel.: +43-5372-64020-0, Fax: +43-5372-64020-20, austria@teadit.eu, www.teadit.eu
TEADIT Deutschland - Schanzenstr. 35, 51063 Köln, GERMANY, Tel.: +49-221-922 342-0, Fax: +49-221-922 342-22, germany@teadit.eu