REV2021313

# **TEADIT 30 SH**

#### Description:

**TEADIT 30 SH** is a highly advanced, large gasket-sheet, produced from 100% pure, multi-directionally expanded PTFE, for extreme application conditions.

TEADIT maintains a quality and environmental management system that is certified according to DIN EN ISO 9001 and DIN EN ISO 14001.

# Advantages:

- The newly developed **TEADIT 30 SH** ePTFE gasket sheet provides

   due to its much more homogeneous and considerably finer
   fibrillation a drastically improved creep resistance compared to other ePTFE sheet materials, especially at elevated temperatures.
- With TEADIT 30 SH, it is possible to make flange calculations according to EN 1591-1 (2014 version) for all dimensions.
- TEADIT 30 SH is suitable for all types of flanges, nearly all media, a wide temperature range and particularly for applications with the toughest demands on purity.
- **TEADIT 30 SH** has exceptional mechanical strength which allows operation with minimal creep at elevated temperatures; see technical data on page 2.
- The excellent malleability of TEADIT 30 SH makes repairing of small defects and/or irregularities of the sealing area (flange surface) unnecessary.
- Gaskets cut from **TEADIT 30 SH** have remarkable mechanical strength and are dimensionally stable, i.e. do not get wider when compressed. This allows to seal narrow flange faces safely.
- **TEADIT 30 SH** is quick and easy to install. The used gasket can be removed effortlessly without residue.

# Properties:

- Color: white
- Size: 1500 mm x 1500 mm
- Thickness: from 0.5 mm up to 9.0 mm
- Temperature Range: -268 °C up to +260 °C (shortly +315 °C)
- Chemical resistance: chemically inert against all substances (pH 0-14), including the most aggressive acids and lyes. The only exceptions are molten alkali metals and elemental fluorine at high temperature and pressure.
- Operating pressure: from vacuum to 200 bar.
- TEADIT 30 SH is not subject to aging or weathering. It can be stored indefinitely.
- Suitable for oxygen applications.
- Typically **TEADIT 30 SH** sheets come printed in red color.
- For applications in the pharmaceutical or food industry, sheets can be delivered with embossed printing without any color.

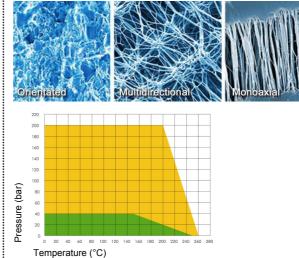
#### Approvals:

- TA-Luft Blow-out FDA & EC 1935/2004 & EU 10/2011
- WRAS DVGW USP Class VI

## Tests:

BAM





## P x T diagram:

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

Since all properties, specifications and application parameters shown throughout this catalogue are approximate and may be mutually influenced, your specific application should not be undertaken without independent study and evaluation for suitability. All technical data and advice given is based on experiences TEADIT® has made so far. Failure to select proper sealing products can result in damage and/or personal injury. Properties, specifications and application parameters are subject to change without notice. TEADIT® does not undertake any liability of any kind whatsoever. Please note: the color of the actual product might vary from the above image on this data-sheet.



TEADIT 30 SH		
Technical Parameters	Unit	TEADIT 30 SH
Thickness	[mm]	0,50 - 9,00
Sheet dimensions	[mm]	1500 x 1500
Purity ePTFE	[%]	100
Color material		plain white
Color printing		red (or embossed)
Operating Temperature Range	[°C]	- 268 to + 260
Operating pressure	[bar]	Vacuum to 200
Gasket factors acc. DIN28090-2		
Compression (room temperature) ɛKSW	[%]	35 - 40
Creep relaxation (room temperature) sKRW	[%]	>3
Compression (elevated temperature) εWSW	[%]	<15
Gasket factors acc. ASTM		
Compressibility ASTM F 36M (34,5 MPa)	[%]	>45
Recovery ASTM F 36M (34,5 MPa)	[%]	>10
Creep ASTM F 38 (100 °C)	[%]	<i>≤</i> 22
Other Properties		
Residual stress DIN 52913	MPa	>18
Leakage rate TA Luft / VDI 2440	mbar*l/(s*m)	8,3*10-7
Leakage rate DIN 3535-6 (40bar, N2)	ml/min	<0,01
Tensile strength ASTM F 152	MPa	>25
Gasket factor "m" ASTM		2
Minimum gasket stress "y Stress" ASTM	psi	2800

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