

# TEADIT 28LS-LE - high-purity ePTFE gaskets with diffusion barrier

## Description:

TEADIT 28LS-LE is a new generation of gaskets produced from 100% pure, multi-directionally ePTFE. These biocompatible gaskets are designed for use in the pharmaceutical, chemical and food industry. A diffusion barrier ensures extraordinarily high sealability at very low gasket stress. TEADIT 28LS-LE gaskets are therefore ideal for - but not limited to - sealing connections where only very low surface pressure can be applied, i.e. on plastic or glass flanges. TEADIT maintains a quality and environmental management system that is certified according to DIN EN ISO 9001 and DIN EN ISO 14001.

## Advantages:

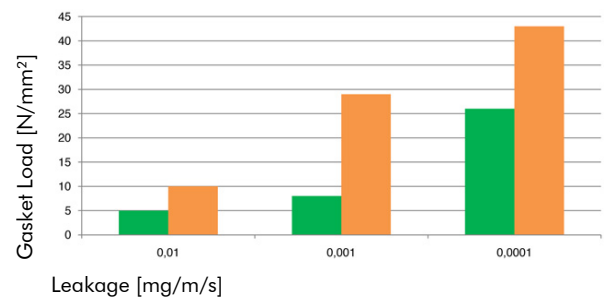
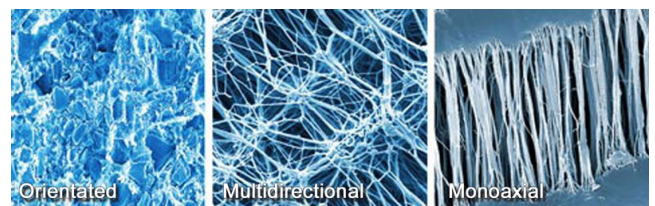
- Universally employable gaskets for all piping applications. Suitable for all types of flanges, nearly all media, a wide temperature range and for applications with the toughest demands on purity. They are inherently clean and suitable for CIP/SIP cycling.
- TEADIT 28LS-LE gaskets have exceptional mechanical strength which allows operation with minimal creep at elevated temperatures.
- TEADIT 28LS-LE gaskets are dimensionally stable, i.e. they do not get wider when compressed.
- The diffusion barrier on the inner diameter significantly increases the sealability of the gaskets and reduces cross contamination and migration.
- TEADIT 28LS-LE gaskets are manufactured according to GMP requirements, with full supply chain integrity and traceability. FDA and EU 1935/2004 certificates, issued by the Fraunhofer Institute, confirm its usability in the food and pharmaceutical Industry.
- TEADIT 28LS-LE gaskets can be easily identified by the embossed labelling, showing both type and dimension.
- TEADIT 28LS-LE gaskets are not subject to aging or weathering. They can be stored indefinitely.

## Properties:

- Color: white
- Thickness: 3.0 and 6.0 mm
- Sizes: EN 1514-1 and ASME B 16.21
- 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
- Operating pressure: from vacuum up to 200 bar

## Tests:

- EN13555



## Leakage rate Teadit 28LS-LE (green) vs Low Load Gasket Competitor (orange)

## Approvals:

- FDA 21 CFR 177.1550 • EC 1935/2004 • EU 10/2011
- USP Plastic Class VI • TA Luft • Blow Out • WRAS
- NSF/ANSI/CAN 61\*

\*Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

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.

<b>TEADIT 28LS-LE</b>		
<b>Technical Parameters</b>	<b>Unit</b>	<b>TEADIT 28LS-LE</b>
Thickness DIN 28091-1	[mm]	3,0 / 6,0
Purity ePTFE	[%]	100
Color material		plain white
Color printing		embossed
Operating Temperature Range	[°C]	- 268 to + 260
Operating pressure	[bar]	Vacuum to 200
<b>Gasket factors acc. DIN28090-2</b>		
Compression (room temperature) εKSW	[%]	35 - 40
Creep relaxation (room temperature) εKRW	[%]	>3
Compression (elevated temperature) εWSW	[%]	<15
<b>Gasket factors acc. ASTM</b>		
Compressibility ASTM F 36M (34,5 MPa)	[%]	>45
Recovery ASTM F 36M (34,5 MPa)	[%]	>10
Creep ASTM F 38 (100 °C)	[%]	≤22
<b>Other Properties</b>		
Residual stress DIN 52913	MPa	>15
Leakage rate TA Luft / VDI 2440	mbar*l/(s*m)	1*10 <sup>-6</sup>
Leakage rate DIN 3535-6 (40bar, N2)	ml/min	<0,001
Tensile strength ASTM F 152	MPa	>20
Gasket factor "m" ASTM		2 (for 3,0 mm)
Minimum gasket stress "y Stress" ASTM	psi	750 (for 3,0 mm)

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 INTERNATIONAL PROD. GMBH - Europastraße 12, 6322 Kirchbichl, AUSTRIA,  
Tel.: +43-5332-74000, Fax: +43-5332-74000-120, austria@teadit.com, www.teadit.com