



Product information

01/051113

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 expanded PTFE.

The 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.

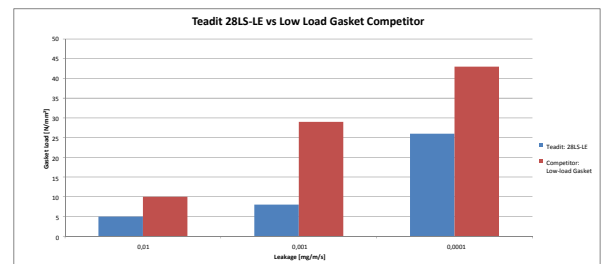
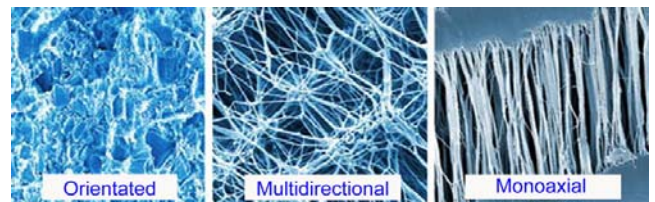
TEADIT 28LS-LE gaskets are therefore ideal for - but not limited to - sealing connections where only very low surface pressure can be applied, i.e. on plastic or glass flanges.

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:

- Colour: white
- Thickness: 1.5 - 3.0mm and 6.0mm
- Sizes: EN 1514-1 and ASME 16.21
- Temperature range: -240° C up to +270° C, for short periods up to 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



P x T diagramm:

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 coloured area shows the maximum application limits.

Main Approvals:

- FDA 21 CFR 177.1550 and EU 1935/2004
- USP Plastic Class VI
- TA Luft and Blow Out Test



TEADIT 28LS-LE			
property	test method	nominal value	parameters
density [g/cm ³]	ASTM D 792	0.9	
compressibility ϵ KSW [%]	DIN 28090 - 2	41	$\sigma = 20$ MPa
recovery ϵ KRW [%]	DIN 28090 - 2	10	$\sigma = 20$ MPa
tensile strength [MPa]	ASTM F152	31	room temperature
stress retention [MPa]	DIN 52913	15	30 N/mm ² , 150°C, 16h
Q min 0,01 [MPa]	EN 13555	< 5	HE 40 bar
Q smin 0,01 [MPa]	EN 13555	< 5	HE 40 bar
Q min 0,001 [MPa]	EN 13555	8	HE 40 bar
Q smin 0,001 [MPa]	EN 13555	8	HE 40 bar
Q smax	EN 13555	> 140	room temperature

**Disclaimer**

Please note, failure to select the correct materials or products we supply ("the Products") may result in damage to plant, equipment or property. In some instances, it may cause death or personal injury. We are not designers and do not give advice about design related matters concerning the Products. We can help and assist with the technical specifications for the Products. In specific applications, particularly where critical conditions exist, we will try to assist you within the limitations of the services that we offer. All information supplied by us is intended as technical co-operation outlining the specifications of the different Products which we supply. To the extent permitted in law, no warranty is given in respect of any information supplied by us. The customer must satisfy themselves as to the suitability of the Products for their intended application and use. The correct fitting of Products is the responsibility of the customer. Your statutory rights remain unaffected. Save in respect of death, personal injury or fraud, our entire liability to you, however arising from the supply of Products shall be limited to the £10M indemnity amount provided by our insurers.