TEADIT PRODUCT BOOK

2024

CATALOGUE COMPENDIUM V-02-06-2024



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PRODUCT OVERVIEW



Joint-sealant tapes

Multi-directional ePTFE

TEADIT® 25 BI NSF/ANSI/CAN 61*, EN 13555, FDA, TA Luft, WRAS, EC 1935/2004, EU 10/2011; 100 % pure PTFE, multidirectional expanded, from 10 to 65 mm wide, 2 to 9 mm thick, dimensional stability, only the thickness changes under compression, one material for many applications - less risk of using the wrong material

Mono-directional ePTFE

TEADIT® 24 B NSF/ANSI/CAN 61*, EN 13555, BAM-Test, DVGW, FDA, TA Luft, WRAS, EC 1935/2004, EU 10/2011; 100 % pure ePTFE, width from 3 mm to 40 mm in 1.5 mm to 7.0 mm thickness, for all kinds of flanged joints TEADIT® 24 BB NSF/ANSI/CAN 61*, FDA, WRAS, EC 1935/2004, EU 10/2011; 100 % pure ePTFE, width from 25 mm to 200 mm in 0.5 mm up to 3.0 mm thickness, for all kinds of flanged joints **TEADIT® 24 HD** NSF/ANSI/CAN 61*, FDA, WRAS, EC 1935/2004, EU 10/2011; 100 % pure ePTFE, width from 3.2 mm to 15 mm wide in 0.3 mm up to 7.0 mm thickness, pre-densified gasket tape

Sealing tape TEADIT® 3070 FDA from filled ePTFE-yarns, braided into a tube and formed into a rectangular cross section, standard dimensions between 10 and 50 mm, soft and pliable, strong and durable Sealing tape TEADIT® 3110 expanded, flexible graphite yarns, braided into a tube, which is folded flat to form a tape, standard dimensions between 10 and 50 mm, excellent temperature and chemical stability, high pressure

Sealing tape TEADIT® 3110/I expanded, flexible graphite yarns reinforced with fine metal wires, braided into a tube, which is folded flat to form a tape, standard dimensions between 10 and 50 mm, excellent temperature and chemical stability, outstanding pressure resistance



Braided gland-packings

Carbon/Graphite Yarn: Graphite / Carbon / exp. Graphite Yarn: PTFE / ePTFE / PTFE-Extrud. / ePTFE+Graphite PTFE Aramid Yarn: Para Aramid (continuous and staple) / Meta-Aramid Synthetic Yarn: Acryl / Polyimid / Novoloid

Natural

Glass Yarn: Continuous filament / Staple fibre, texturized yarn

From the in-house production of yarns and filaments up to the end product, TEADIT® is using its long experience and continuously developed know-how to provide highest quality braided packings for various industrial sectors.

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

Packing rings and packing accessories



Sets of pure graphite-rings (98% or 99,85% purity) Packing cutter (45°)

Precise 45° angle cut for respective shaft diameter, no wrong cuts - no wastage

Packing extractors

Packing STYLE 2848

Fully Traceable Fugitive Emissions Packing (TEADIT® TAGS™)

2848 is a Low-Emissions packing designed for control and isolating valves alike. For control valves, it has proven performance on ISO 15848-1 most stringent test procedure, CC3.

TEADIT® 28 LS-LE

High-purity ePTFE gaskets with diffusion barrier



The inner bore of the 28 LS-LE gasket is enhanced with a diffusion barrier without any additional filler or other material, to avoid cross section leakage at low gasket stress. Therefore TEADIT® 28 LS-LE achieves high tightness with low bolt load.

Gasket sheets

Multi-directional ePTFE gasket sheets

High quality ePTFE material, two of the best, most versatile and most reliable gasket materials on the market, sheet size: 1,500 x 1,500 mm in 0.5 up to 6.0 mm thickness, available also as cut gasket:

TEADIT® 30 SH (for extreme application conditions) NSF/ANSI/CAN 61*, EN 13555, FDA, TA Luft, BAM-Test, Blow-out test (VDI 2200), EC 1935/2004, EU 10/2011, USP VI, DVGW, WRAS;

TEADIT® 24 SH NSF/ANSI/CAN 61*, EN 13555, FDA, TA Luft, BAM-Test, Blow-out test (VDI 2200), EC 1935/2004, EU 10/2011, USP VI, ABS Product type approval, DVGW, WRAS;

Structured PTFE-gasket sheets

Multidirectionally orientated structure, made from pure PTFE with special filler substances, sheet sizes: TF 1570 1500 x 1500 mm, thickness 1,5/2,0/3,0/4,8/6,4 mm and 1200 x 1200 mm, 1,0 mm; TF 1580/TF 1590 1500 x 1500 mm, thickness 1,5/2,0/3,0 mm and 1200 x 1200 mm, 1,0 mm

TEADIT® PL 100 EN 13555, Blow-out test (VDI 2200), FDA Conformity; filled with hollow glass micro spheres, outstanding mechanical resistance and residual stress

TEADIT® TEALON TF 1570 EN 13555, FDA, TA Luft, BAM-Test, Blow-out test (VDI 2200), ABS Product type approval, EC 1935/2004, EU 10/2011; filled with hollow glass micro spheres, excellent adaptability, suitable for pressure sensitive connections made of glass, ceramics etc.

TEADIT® TEALON TF 1580 EN 13555, FDA, TA Luft, BAM-Test, DVGW, Blow-out test (VDI 2200), ABS Product type approval, EC 1935/2004, EU 10/2011; filled with Barium Sulfate, particularly suited for use with caustics

TEADIT® TEALON TF 1590 EN 13555, FDA, TA Luft, BAM-Test, EC 1935/2004, EU 10/2011, DVGW, Blow-out test (VDI 2200), ABS Product type approval; filled with Silica, particularly suited for use with acids

Compressed fibre sheets NA

Sheet sizes (mm): 1500 x 1600, 1500 x 3200 thickness 0,5 / 0,8 / 1,0 / 1,5 / 2,0 / 3,0

TEADIT® NA 1006 ABS Product type approval; a blend of fibers, bonded with Nitrile rubber (NBR), suitable for water .oils and Acides in mild service

TEADIT® NA 1005 ABS Product type approval, Flame-resistance ISO 19921; a blend of aramid and other synthetic fibers bonded with Nitrile rubber (NBR), for petroleum derivatives, water, chemical products in general, excellent cost-performance ratio

TEADIT® NA 1002 EU EN 13555, KTW, TA Luft, WRAS, BAM-Test, Blow-out test (VDI 2200), ABS Product type approval, Flame-resistance ISO 19921; Aramid fibres with Nitrile rubber (NBR), for petroleum derivatives, water, exeptional performance in gas applications

TEADIT® NA 1122 Inorganic fibres & special fillers, bonded with Nitrile rubber (NBR), developed to exhibit superior thermal stability during extreme thermal cycling applications, Specially recommended for saturated & superheated steam TEADIT® NA 1100 EN 13555, DVGW, TA Luft, Blow-out test (VDI 2200), ABS Product type approval; Graphite and carbon fibres, with

Nitrile rubber (NBR) for petroleum derivatives, water, saturated steam, solvents, gases and chemical products in general.

Expanded graphite sheets

From pure, expanded flexible graphite and without any other fibers or filler materials. Particularly suited for applications with extremely high or low temperatures, with highly corrosive and aggressive media, extremely resistant to temperature cycles. Dimensions: 1000 x 1000 mm & 1500 x 1500 mm, thickness 1,0 / 1,5 / 2,0 / 3,0 mm

TEADIT® GP 1520 Graphite sheet

TEADIT® GR 1520 Graphite sheet with plain metal insert

TEADIT® GE 1520 Graphite sheet with tanged metal insert

TEADIT® GR 1700 Multilayer high strength graphite sheet

Welded Gaskets made from TEADIT® TF sheets

Highly economical and without technical restrictions, welded gaskets can be used the same way as gaskets cut from one piece. The results of research and testing show welded gaskets made from TEADIT® TF materials reach the same leakage class as gaskets cut from one piece.

Flat gaskets

Flat gaskets (with and without metal eyelets)

Cut gaskets from all TEADIT® sheets available, manufactured according to all established engineering standards, custom-made products

PTFE envelope-gaskets Double-jacketed gaskets Manhole gaskets and lid seals Spiral-wound gaskets Kammprofile gaskets



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sealing for a safer and greener tomorrow



EXPANDED AND STRUCTURED PTFE SEALING MATERIALS





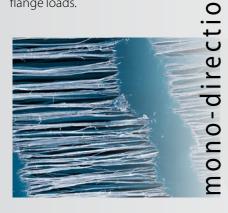
PTFE as the basis for gaskets of the newest generation...

Numerous advantages make our PTFE-products an ideal and extremely versatile sealing material:

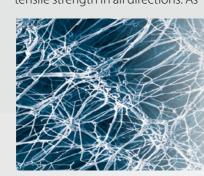
- chemical resistance from pH 0 14
- temperature range from -268° C up to + 260° C (+315° C for short periods)
- high residual stress
- physiologically harmless
- conforms to FDA regulations
- non-ageing, UV resistant
- non-inflammable
- vacuum resistant

...perfected by special TEADIT® manufacturing processes

Our all-purpose mono-directionally expanded PTFE joint sealant tapes are manufactured from 100 % pure PTFE (Polytetrafluorethylen). A special, thermo-mechanical stretching process results in a micro-porous fibre structure which adds high tensile strength and malleability to the general advantages of PTFE, while the negative characteristics - like cold flow and creep - are almost totally eliminated. Because of the excellent malleability of expanded PTFE, TEADIT® joint sealant tapes adapt easily to irregularities or damages on the sealing areas (flange faces), sealing effectively at already low flange loads.



Based on the production process of our monoaxially expanded PTFE tapes, we have strived to further improve the cold flow properties and deformation characteristics of expanded PTFE-material. We have managed to develop the complex stretching process to a level which results in a multi-directional fibre structure which guarantees equal tensile strength in all directions. As



a result of this, the new material has excellent dimensional stability and shows significant superior creep resistance. All this without losing any of the superb sealing properties of pure PTFE.

Ξ

The latest addition to our family of ePTFE sealing products is our range



of TF sheets. A unique production process provides a highly fibrillated PTFE structure of the gasket sheets, which results - together with the carefully chosen filler materials - in very high mechanical strength of the sheets, to improve handling of big gaskets easier. The filler materials are chosen to suit the different applications occurring in all kinds of industry.

This makes TEADIT® the only manufacturer world-wide who produces a full range of expanded AND structured PTFE sealing products.

All production processes are subject to rigorous quality control registered under ISO 9001/14001



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Structured PTFE products

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Structured PTFE gasket material

The range of structured PTFE gasket sheets are made from pure PTFE with special filler substances. Because of the multidirectionally orientated fibre structure of these PTFE-sheets, the problems usually associated with PTFE, like cold flow and creep, have been largely eliminated. Gaskets from those sheets can be used in considerably higher temperature/pressure combinations than conventional PTFE materials.

Advantages

- excellent compressibility
- outstanding recovery
- low hot creep during service
- excellent sealability
- drastically reduced cold flow and creep
- high mechanical strength
- excellent chemical resistance

Advantages at installation

- easy to handle
- low assembly pressure
- quick and easy installation

Product standard

Sheet size: 1,500 x 1,500 mm in 1.5, 2.0 and 3.0 mm thickness, and as ready cut gasket.

Other thicknesses on request: 0,5 up to 6,4 mm

Please note:

all our PTFE gasket sheets exceed the demanding TA Luft standard.

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Structured PTFE gasket material

TEADIT® TEALON TF 1590

filled with Silica colour: fawn

Special advantages

- outstanding resistance against most chemicals
- particularly suited for use with acids
- high resistance against blow-out
- excellent mechanical strength

Application areas

- very versatile gasket material, best suited for chemical and petrochemical processes



temperature range: -268° C up to $+260^{\circ}$ C max. pressure: up to 83 bar pH 0-14

minimum assembly pressure Qmin 0,01 = 17 MPa (10 bar; 2 mm)
min. gasket pressure under operating conditions QSmin 0,01 < 10 MPa
maximum surface pressure Qmax > 240 MPa
TA Luft / leakage according to VDI 2440 L = 1.1•10-6 mbar I/(sm)



Tests:

BAM

Approvals:

DVGW, Air Liquide (oxygen), FDA, TA Luft, W270, Blow-out test (VDI 2200), EC 1935/2004, EU 10/2011, ABS, EN 13555, Chlorine Institute (Pamphlet 95)

TEADIT® TEALON TF 1580

filled with Barium Sulfate colour: off-white

Special advantages

- excellent resistance against most chemicals
- particularly suited for use with strong caustics

Application areas

- suitable for "clean" processes and products
- extremely versatile gasket material, best suited for pharmaceutical and food industry

Technical data

temperature range: -268° C up to $+260^{\circ}$ C max. pressure: up to 83 bar pH 0-14

minimum assembly pressure Qmin 0,01 = 10 MPa (10 bar; 2 mm) min. gasket pressure under operating conditions QSmin 0,01 < 10 MPa maximum surface pressure Qmax > 240 MPa TA Luft / leakage according to VDI 2440 $L = 5.9 \cdot 10-7$ mbar I/(sm)



Tests:

BAM

Approvals:

DVGW, FDA, TA Luft, Blow-out test (VDI 2200), EC 1935/2004, EU 10/2011, ABS, Chlorine Institute (Pamphlet 95), EN 13555



Structured PTFE gasket material

TEADIT® TEALON TF 1570

filled with hollow glass micro spheres colour: blue

Special advantages

- excellent adaptability
- high compressibility
- very good chemical resistance

Application areas

- suitable for pressure sensitive connections made of glass, ceramics etc.
- compensates for irregularities, roughness and/or damages on the sealing areas
- all-round gasket material, specially suited for the chemical and pharmaceutical industry

Technical data

temperature range: -268° C up to + 260° C max. pressure: up to 55 bar pH 0 – 14

minimum assembly pressure Qmin 0,01 = 7 MPa (10 bar; 2 mm) minimum gasket pressure under operating conditions QSmin 0,01 < 10 MPa maximum surface pressure Qmax > 240 MPa

TA Luft / leakage according to VDI 2440 L = 3.7 •10-6 mbar l/(sm)

PL 100

filled with hollow glass micro spheres colour: white

Special advantages

- Highly compressible and therefore adaptable to any sealing surface
- Outstanding mechanical resistance and residual stress

Application areas

- Suitable for service with most aggressive fluids at a wide temperature range

Approvals:

EN 13555,

Blow-out test (VDI 2200), FDA Conformity



Technical data

Tests:

BAM

Approvals:

TA Luft, FDA, Blow-out test (VDI 2200),

EC 1935/2004, EU 10/2011, ABS, EN 13555

temperature range: -268° C up to + 260° C
max. pressure: up to 55 bar
pH 0 – 14
min. assembly pressure Qmin 0,01 = 20 MPa
(40 bar; 2 mm)
minimum gasket pressure under operating conditions
QSmin 0,01 < 12 MPa
maximum surface pressure Qmax > 240 MPa
TA Luft / leakage according to VDI 2440
L=1.1 •10-5 mbar l/(sm)

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Welded gaskets

Welded gaskets made from our TEADIT® structured sheets

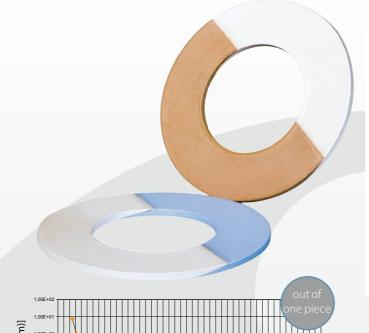
For over 30 years TEADIT® has been welding large size PTFE-gaskets. We enhanced this practical knowledge, the technology and materials to provide customers with gaskets in big dimensions (larger than sheet size) made from our structured materials. Our precisely manufactured welded gaskets achieve the same tightness classes as gaskets made from one single

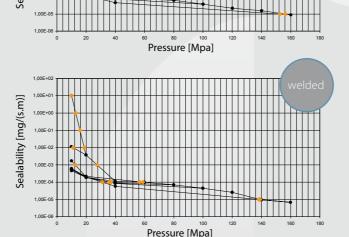
Advantages

- Same leakage classes as gaskets cut from one
- Gaskets in diameters far beyond sheet size are possible.
- Maximum material yield by producing gaskets from welded segments - therefore lower cost.
- TEADIT® welded gaskets are manufactured true to size. This results in fast and easy installation, as such close tolerances cannot be achieved by welding the gasket on site.

Application areas

- Equipment which requires gaskets bigger than the available sheet(s).
- Bigger gaskets, where the focus is on material cost optimization.





By research and testing TEADIT® provided evidence that welded gaskets made from TEADIT® TF materials, in terms of leakage, show no difference to gaskets cut from one piece. The above tables are showing the test results of leakage tests of welded and single-piece TF 1590 gaskets. It can be seen that at an applied gasket pressure of 20 MPa both the welded and the single-piece gasket reach a leakage class of 10⁻² mg / (s⋅m). At a gasket pressure of 40 MPa both types of gaskets reach a leakage class of 10-4 mg / (s·m). Tests have been carried out according to DIN EN 13555 at room temperature with Helium at internal pressure of 40bar.



Mono-directional ePTFE gasket material

TEADIT® 24 B

TEADIT® 24 B is a high-grade PTFE joint sealant tape, produced by a special monoaxial stretching process from 100 % pure PTFE. An adhesive strip - approved for use with foodstuffs - makes installation

Advantages

Safety

- chemically inert against most substances
- covers a wide temperature range
- non ageing, UV resistant

Quick and easy installation

- adhesive strip aides installation
- excellent malleability compensates for irregularities
- used tape can be removed easily and without residue

Cost saving

- reduced down time because of quick installation
- minimal stock cost a few dimensions cover most applications
- absolutely no waste

Product standard

Width from 3 mm to 40 mm in 1.5 mm to 7.0 mm thickness

Special dimensions and recommendations on request.

Technical data

temperature range: -268° C up to +260° C (short time $+315^{\circ}$ C) pH 0 - 14gasket parameter, assembly $Q_{min 0,01} = 17 \text{ MPa}$ (10 bar; 2 mm)

temperature range: -60° C up to +230° C

Typical application range

operating pressure: from vacuum to 40 bar For details on applications with higher temperatures and / or pressure please contact TEADIT® application engineering!

Tests:

BAM

Approvals:

DVGW, WRAS, TA Luft, EN 13555, NSF/ANSI/CAN 61*, FDA & EC 1935/2004 & EU 10/2011 (all incl. adhesive)

Application areas

- for all kinds of flanged joints
- for housings of pumps, compressors, etc.
- as a lid seal for various containers and vessels
- gasket for inspection holes, man holes, venting systems, heat exchangers, etc.
- for pressure sensitive and stress sensitive joints where only a low flange load may be applied

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





Mono-directional ePTFE gasket material

TEADIT® 24 BB

TEADIT® 24 BB is the wider version of our universally applicable, 100 % pure, expanded PTFE gasket tape. Because of the excellent thermal and chemical resistance of TEADIT® 24 BB, it can be used in a wide variety of static applications in nearly all kinds of the industry. The exceptional malleability of expanded PTFE can compensate for out-ofparallel and/or damaged sealing surfaces and allows use with stress sensitive connections and applications where only a limited flange load is available.

Technical data

temperature range: -268° C up to $+260^{\circ}$ C (short time $+315^{\circ}$ C) pH 0 – 14 gasket parameter, assembly $Q_{min\ 0,01} = 30\ MPa$

Typical application range

temperature range: -60° C up to +230° C operating pressure: from vacuum to 40 bar For details on applications with higher temperatures and/ or pressure contact TEADIT® application engineering!

Advantages

- all physical properties of 100 % pure PTFE
- gaskets can be economically cut from the tape
- cost savings because of low stock cost and reduced maintenance time



Product standard

Width from 25 to 200 mm in 0.5 up to 3.0 mm thickness

Approvals:

WRAS, NSF/ANSI/CAN 61*, FDA & EC 1935/2004 & EU 10/2011 (all incl. adhesive)

TEADIT® 24 HD

TEADIT® 24 HD is a pre-densified 100 % pure PTFE gasket tape. Because of its higher original density - compared to conventional PTFE joint sealant - TEADIT® 24 HD is particularly well suited to seal irregular - e.g. out-of-parallel - and/or damaged flange faces, and for applications where a certain remaining gasket thickness is required.

Technical data

temperature range: -268° C up to $+260^{\circ}$ C (short time $+315^{\circ}$ C) pH 0 – 14 gasket parameter, assembly Qmin 0,01 = 27 MPa

Typical application range

temperature range: -60° C up to +230° C operating pressure: from vacuum to 40 bar For details on applications with higher temperatures and / or pressure please contact TEADIT® application engineering!

Product standard

Width from 3.2 to 15 mm in 0.3 up to 7.0 mm thickness

Advantages

- all physical properties of 100% pure PTFE
- the higher original density results in increased remaining gasket thickness

Typical applications

- sealing of tube heat-exchangers
- extra large flanges, containers, lids etc
- pump housings
- inspection holes, manholes, and many more



Approvals:

WRAS, NSF/ANSI/CAN 61*, FDA & EC 1935/2004 & EU 10/2011 (all incl. adhesive)



Multi-directional ePTFE gasket material

TEADIT® 25 BI

This top of the range PTFE joint sealant tape belongs also to the group of multi-directionally expanded PTFE sealing materials. Again, a very complex production process ensures equal rigidity in longitudinal and cross direction, resulting in high dimensional stability and extremely low cold flow, combined with excellent malleability and very easy handling. This makes TEADIT® 25 BI particularly well suited for use with all pressure sensitive and stress sensitive connections, it also compensates for irregularities and/or damages on the sealing areas.

Advantages

Safety

- dimensional stability, only the thickness changes under compression
- chemically resistant against all substances (exceptions: molten alkali metals and elemental fluorine)
- excellent temperature resistance
- physiologically harmless non contaminating
- conforms to FDA regulations

Cost saving

- reduced stock cost a few different sizes cover most applications
- no waste no off-cuts
- one material for many applications less risk of using the wrong material
- less down time no cutting or punching, quick and easy to install
- can be stored indefinitely (without adhesive backing)

Technical data

temperature range: -268° C up to + 260° C (short time +315° C)

pH 0 - 14

minimum assembly pressure $Q_{min\,0,01}=24$ MPa (10 bar; 3 mm) minimum gasket pressure under operating conditions $Q_{Smin\,0,01}<10$ MPa maximum surface pressure $Q_{max}>240$ MPa

TA Luft / leakage according to VDI 2440 L = $2.6 \cdot 10^{-7}$ mbar I/(sm)

Typical application range

temperature range: -60° C up to $+230^{\circ}$ C operating pressure: from vacuum to 40 bar

For details on applications with higher temperatures and / or pressure please contact TEADIT® application engineering!

Approvals:

TA Luft, WRAS, EN 13555, NSF/ANSI/CAN 61*, FDA & EC 1935/2004 & EU 10/2011 (all incl. adhesive)

Application areas

- where a pre-defined gasket width is required
- enamelled components and glass flanges
- heat exchangers, large flanges and pressure vessels
- suction filters and strainers, etc.
- glass lined steel flange and eqipement



Product standard

From 10 to 65 mm wide, 2 to 9 mm thick

Special dimensions as well as recommendations are available on request

Important! Installation instruction

is necessary to join the ends of the gasket tape by means of a scarfed joint!

Please direct your attention to the detailed installation instructions!

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

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Multi-directional ePTFE gasket material

TEADIT® SH ePTFE Sheets

TEADIT® SH products are gasket sheets produced from 100 % pure, multidirectionally expanded PTFE. A special production process ensures equal tensile strength in all directions. This makes gaskets cut from TEADIT® SH sheets one of the best, most versatile and most reliable gasket materials on the market. Cold flow and creep have been eliminated, gasket parameters have been drastically improved, while all the excellent physical properties of PTFE have been fully retained.

Advantages

- Universally employable gasket sheet for all applications. It is suitable for all types of flanges, nearly all media, a wide Temperature range and even for applications with the toughest demands on purity. It is inherently clean and nontoxic.
- Better creep resistance at higher temp. than other types of PTFE sheets.
- Excellent malleability.
- Gaskets cut from TEADIT® SH sheets are dimensionally stable.
- TEADIT® SH sheets are quick & simple to install.
- Can be stored indefinitely.

Application areas

- material does not get wider under compression
- easy to cut or punch
- suitable also for enamel flanges and/or vessels
- compensates for irregularities and/or damages on the flange faces
- has all inherent advantages of pure PTFE

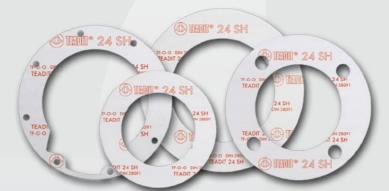
Product standard

Sheet size: 1,500 x 1,500 mm in 0.5 up to 9.0 mm thickness and as ready cut gasket, up from 1,5mm **embossed** available.

TEADIT® 24 SH

Tests: BAM

Approvals: FDA, TA Luft, USP VI, Blow-ot test (VDI 2200), DVGW, WRAS, EC 1935/2004, EU 10/2011, ABS, EN 13555, NSF/ANSI/CAN 61*



Technical data

temperature range: -268° C up to $+260^{\circ}$ C (short time $+315^{\circ}$ C) operating pressure: from vacuum up to 200 bar pH 0-14 minimum assembly pressure Qmin 0,01=20 MPa (10 bar; 2 mm) minimum gasket pressure under operating conditions QSmin 0,01<10 MPa

maximum surface pressure Qmax > 240 MPa TA Luft / leakage according to VDI 2440 $L = 2.6 \cdot 10-7$ mbar I/(sm)

TEADIT® 24 SH is also available in a more rigid version as **TEADIT® 24 SH-R**, in 1.5mm, 2.0mm and 3.0mm thickness. Please ask for the corresponding data-sheet.





Multi-directional ePTFE gasket material

TEADIT® 30 SH

Advantages

- The TEADIT® 30 SH gasket sheet provides, due to its much stronger and considerably finer fibrillation, a drastically improved creep resistance, especially at elevated temperatures.
- TEADIT® 30 SH simplifies flange calculations according to EN 1591-1

Tests: BAM

Approvals: FDA, TA Luft, USP VI, Blow-ot test (VDI 2200), DVGW, WRAS, EC 1935/2004, EU 10/2011, ABS, EN 13555, NSF/ANSI/CAN 61*



Technical data

temperature range: -268° C up to $+260^{\circ}$ C (short time $+315^{\circ}$ C) operating pressure: from vacuum up to 200 bar pH 0-14 minimum assembly pressure $Q_{min\,0,01}=22$ MPa (10 bar; 2 mm) minimum gasket pressure under operating conditions $Q_{Smin\,0,01}<10$ MPa maximum surface pressure $Q_{max}>240$ MPa TA Luft / leakage according to VDI 2440 L = $8.3\cdot10^{-7}$ mbar I/(sm)

TEADIT® 28 LS-LE High-purity ePTFE gaskets with diffusion barrier

TEADIT® 28LS-LE 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.

Advantages

- For toughest demands on purity. They are inherently clean and suitable for CIP/SIP cycling.
- Manufactured according to GMP requirements, with full supply chain integrity and traceability. FDA and EC 1935/2004 certificates, issued by the Fraunhofer Institute, confirm its usability in the food and pharmaceutical Industry.
- Ideal for many flange types: Glass lined, FRP (fibre reinforced plastics), Glass, Plastic, also suitable for metal flanges
- GMP compliant packaging: Max 2 gaskets in one plastic bag / Plastic bags packed in a cardboard



Approvals:

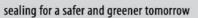
FDA, TA Luft, Blow-ot test (VDI 2200), EC 1935/2004, EU 10/2011, USP VI, NSF/ANSI/CAN 61*

Standard Dimensions

Thickness: 3.0 and 6.0 mm
DIN EN 1514 DN10 - DN800
and PN 2,5 - PN 40 in IBC
ASME B 16.21 #150 in ½" – 24" for FR & FF

9 1 (5)





Multi-directional ePTFE gasket sheet: TEADIT® 24 SH

[Tests: BAM, Approvals: TA-Luft, Blow-Out, FDA, EU 1935/2004, USP Plastic Class VI, DVGW, WRc, ABS]

Structured PTFE-gasket sheets TEALON TF: TEADIT® TF 1580 (Approvals: TA Luft, Blow-Out, DVGW, FDA, ABS, EU 1935/2004, Tests: BAM)

TEADIT® TF 1590 (Approvals: TA Luft, Blow-Out, FDA, EU 1935/2004, DVGW, Air Liquide, KTW, ABS, Tests: BAM)

TEADIT® TF 1570 (Approvals: TA Luft, Blow-Out, FDA, ABS, EU 1935/2004, Tests: BAM)

Braided gland-packings: TEADIT® 2005 FDA (FDA, EU Regulation 1935/2004), TEADIT® 2006 FDA (FDA)



TEADIT® 30 SH

A NEW HIGH-TECH EXPANDED PTFE-SHEET WITH SIGNIFICANTLY IMPROVED CHARACTERISTICS

TEADIT® SOLUTION TO EN1591-1 (2014) FOR PTFE GASKETS



TEADIT 30 S

TI-O-O DIN 28091

TEADIT® 30 SH

TEADIT® solution to EN1591-1 (2014) for PTFE gaskets

Since the revision of the calculation standard EN1591 (2014 version), pressure has strongly increased to improve certain parameters by the manufacturers of PTFE sheets and gaskets.

The revised version of this standard demands substantially improved mechanical material properties for successful flange calculations. In particular, the flow behavior has a great influence on the calculations as well as on the maximum permissible surface pressure.

The significant improvement in the new TEADIT® 30 SH ePTFE

(C) TAMI* 30 SH

TEADIT 30 SH

@ TAIT 30 SH

TEADIT 30 SH

TEADIT 30 SH

(2) TAMI * 30 SH

F-O-O DIN 28091 TEADIT 30 SH

TAIL 30 SH

TEADIT 30 SH

CO TENTO 30 SH

considerably finer fibrillation. The VCI (German Chemical Industry Association) guideline for flange assemblies requires in "Appendix C" a minimum PQR value of 0,45 (under maximum operating temperature). On this basis, TEADIT® 30 SH meets the requirement with a maximum permissible operating temperature for PTFE i.e. 260°C. Filled restructured PTFE materials, as well as other expanded PTFE sheets simply cannot keep up with these requirements.

gasket sheet is credited to a much more homogeneous and

The strategic improvements of the new TEADIT® 30 SH material are also reflected in the maximum permissible gasket stress Qsmax. According to EN13555 the shrinking of the inner diameter must be considered for Qsmax determination. While the Qsmax value for most PTFE gaskets has to be significantly reduced, particularly at elevated temperatures, this is not the case with TEADIT® 30 SH gaskets!

The data-sheets according to EN13555 have already been uploaded at http://www.gasketdata.org/ where you can see the outstanding mechanical properties of the product.

All relevant approvals for the new TEADIT® 30 SH - like TA-Luft, safety of blow-out, FDA and 1935/2004 - are already available. TEADIT® 30 SH sheets are available on short call, both in printed and/or embossed version.

This and more news available at our new website http://www.teadit.com

> HERE 30 SH IAIII° 30 SH

TEADIT® 30 SH

A new high-tech expanded PTFE-sheet with significantly improved characteristics

Description:

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

Advantages:

- The newly developed TEADIT® 30 SH expanded PTFE 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.
- The excellent malleability of TEADIT® 30 SH makes repairing of small defects and/or irregularities of the sealing area (flange surface) unnecessary.

BAM

Approvals:

TA-Luft, FDA, WRAS, USP Class VI, DVGW, Blow-out VDI 2200, NSF/ANSI/CAN 61*, EC 1935/2004, EU 10/2011, EN 13555

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

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can be removed effortlessly without residue.

Properties:

• 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.

• TEADIT® 30 SH is quick and easy to install. The used gasket

- TEADIT® 30 SH is not subject to aging or weathering. It can be stored indefinitely.
- TEADIT® 30 SH complies with FDA regulations 21CFR § 177.1550, it is physiologically harmless.
- 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

TEADIT	[mm] 0,50 - 9,00					
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	10 1	red (or embossed)				
Operating Temperature Range	[°C]	- 268 to + 260				
Operating pressure	[bar]	Vacuum to 200				
Gasket factors acc. DIN28090-2						
Compression (room temperature) εKSW	[%]	35 - 40				
Creep relaxation (room temperature) εKRW	[%]	>3				
Compression (elevated temperature) εWSW	[%]	<15				
Gasket factors acc. ASTM	The same of the sa	0101.3				
Compressibility ASTM F 36M (34,5 MPa)	[%]	>45				
Recovery ASTM F 36M (34,5 MPa)	[%]	>10				
Creep ASTM F 38 (100 °C)	[%]	≤22				
Other Properties						
Residual stress DIN 52913	MPa	>18				
Leakage rate TA Luft / VDI 2240	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				





28LS-LE - HIGH PERFORMANCE FLAT GASKET MADE OF EXPANDED PTFE WITH DIFFUSION BARRIER

For all types of flanges in the Chemical Process and Food & Pharma Industry



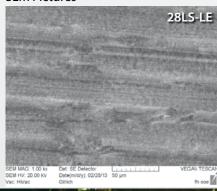
TEADIT® 28LS-LE is a high performance flat gasket with maximum tightness at minimum gasket load!

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.

TEADIT® 28LS-LE is equipped with a diffusion barrier applied by a proprietary thermal and mechanical process. The inner bore of the TEADIT® 28 LS-LE gasket is enhanced with a diffusion barrier without any additional filler or other material, to avoid cross section leakage at low

Therefore TEADIT® 28 LS-LE achieves high tightness with low bolt load.

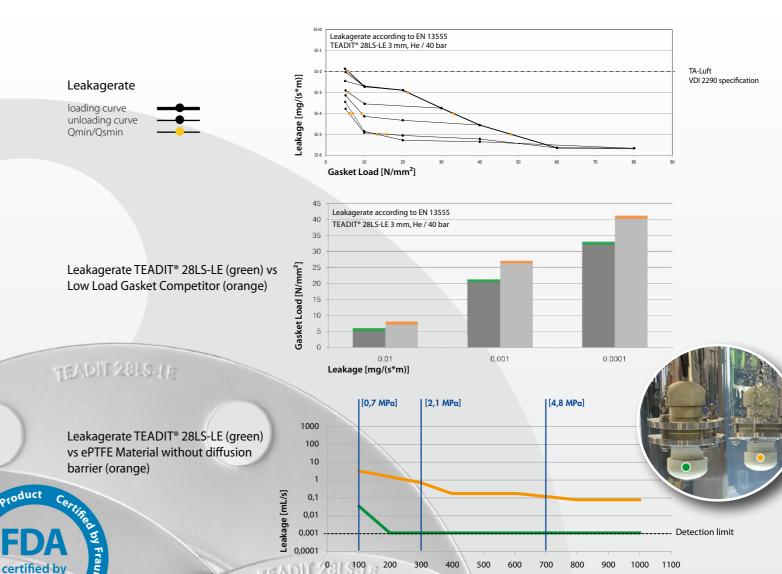
SEM Pictures



IDEAL FOR MANY FLANGE TYPES

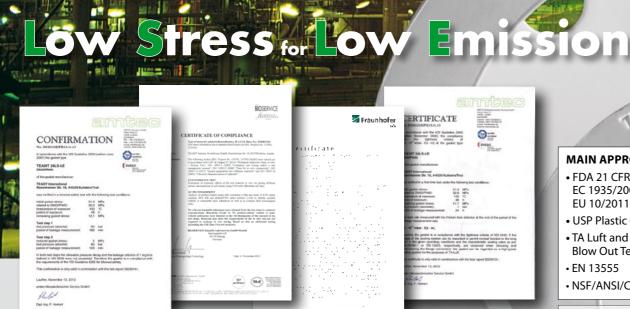
- FRP (fibre reinforced plastics)
- Glass
- Plastic
- Also suitable for metal flanges

TEADIT® 28LS-LE High-purity ePTFE gaskets with diffusion barrier



ADVANTAGES KEY FEATURES

- Universally employable gaskets for all piping applications.
- Suitable for all types of flanges and nearly all media.
- Exceptional mechanical strength which allows operation with minimal creep at elevated temperatures.
- The diffusion barrier on the inner diameter significantly increases the sealability of the gaskets and stops cross contamination and migration.
- Manufactured according to GMP requirements, with full supply chain integrity and traceability. FDA and EC 1935/2004 certificates, issued by the Fraunhofer Institute, confirm its usability in the food and pharmaceutical Industry.
- GMP compliant and protected by a plastic bag from environmental contamination. Packaging printed with a battle.
- Gaskets can be easily identified by the embossed labelling.



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MAIN APPROVALS

- FDA 21 CFR 177.1550, EC 1935/2004 and EU 10/2011
- USP Plastic Class VI
- TA Luft and **Blow Out Test**
- EN 13555
- NSF/ANSI/CAN 61*

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



TEADIT

TEADIT

PACKAGING

- Max 2 gaskets in one plastic bag
- Plastic bags packed in a cardboard

APPLICATION CONDITIONS

-268° C up to +260° C

0-14

(exceptions are molten alkali metals and elemental fluorine)

Press. From Vacuum up to 200 bar

STANDARD DIMENSIONS

Thickness: 3.0 and 6.0 mm

DIN EN 1514 DN10 - DN800 and PN 2,5 - PN 40 in IBC

ASME B 16.21 #150 in 1/2" - 24" for FR & FF





It's time for a better gasket...

HIGH QUALITY CERTIFIED PTFE & ePTFE SEALING PRODUCTS FROM THE MANUFACTURER.





PTFE as a base material in gasket constructions offers an easy and reliable way to obtain sealing solutions under an environment friendly aspect.

TEADIT® is manufacturing a wide range of PTFE and ePTFE based sealing materials in the form of sheets, tapes and packings for all kind of applications and industries. Many years of development, research and experience make **TEADIT®** one of the highest qualified partners for PTFE sealing solutions.

Joint-sealant tapes

Mono-directional ePTFE

TEADIT® 24 B (TA-Luft, DVGW, FDA, EC 1935/2004,

EU 10/2011, WRAS, BAM-Test, EN 13555, NSF/ANSI/CAN 61*) **TEADIT® 24 BB** (FDA, EC 1935/2004, EU 10/2011, WRAS, NSF/ANSI/CAN 61*)

TEADIT® 24 HD (FDA, EC 1935/2004, EU 10/2011, WRAS, NSF/ANSI/CAN 61*)

Multi-directional ePTFE

TEADIT® 25 BI (TA-Luft, FDA, EC 1935/2004, EU 10/2011, WRAS, EN 13555, NS F61)

*Only products bearing the NSF Mark on the product, product packaging,

and/or documentation shipped with the product are certified.

Gasket sheets

Multi-directional ePTFE gasket sheet

TEADIT® 24 SH (TA-Luft, Blow-out test (VDI 2200), DVGW, USP VI, FDA, BAM-Test, EU 10/2011, NSF/ANSI/CAN 61*, EC 1935/2004, WRAS, ABS Product Approval, EN 13555)

TEADIT® 30 SH (FDA, TA Luft, Blow-out test (VDI 2200), EC 1935/2004, EU 10/2011, DVGW, NSF/ANSI/CAN 61*, USP VI, WRAS, ABS Product Approval, BAM-Test, EN 13555)

Structured PTFE-gasket sheets

TEADIT® PL 100 (EN 13555, Blow-out test (VDI 2200), FDA Konformität) TEADIT® TEALON TF 1570 (TA-Luft, Blow-out test (VDI 2200), FDA, EC 1935/2004, EU 10/2011, BAM-Test, ABS Product Approval, EN 13555)

TEADIT® TEALON TF 1580 (TA-Luft, Blow-out test (VDI 2200), FDA, EC 1935/2004, EU 10/2011, BAM-Test, ABS Product Approval, EN 13555)

TEADIT® TEALON TF 1590 (TA-Luft, Blow-out test (VDI 2200), FDA, EC 1935/2004, EU 10/2011, BAM-Test, ABS Product Approval, EN 13555)

Braided gland-packings

TEADIT® 2005 FDA (FDA, EC 1935/2004, EU 10/2011) TEADIT® 2006 FDA (FDA) Dichtungsband TEADIT® 3070 FDA

ePTFE Flat-Gaskets

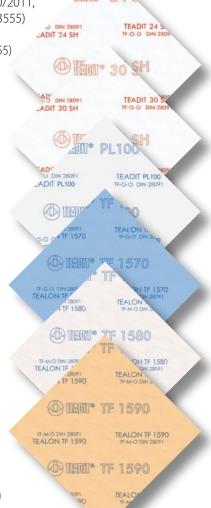
TEADIT® 28 LS-LE (TA-Luft, Blow-out test (VDI 2200), USP Class VI, FDA, EC 1935/2004, EU 10/2011, NSF/ANSI/CAN 61*)

TEADIT® 24 SH-PRC (TA-Luft, Blow-out test (VDI 2200), DVGW, USP Class VI,

FDA, EC 1935/2004, EU 10/2011, BAM-Test, WRAS,

ABS Product Approval)

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sealing for a safer and greener tomorrow

Multi-directional ePTFE gasket sheet: TEADIT® 24 SH

[Tests: BAM, Approvals: TA-Luft, Blow-Out, FDA, EU 1935/2004, USP Plastic Class VI, DVGW, WRc, ABS]

Structured PTFE-gasket sheets TEALON TF: TEADIT® TF 1580 (Approvals: TA Luft, Blow-Out, DVGW, FDA, ABS, EU 1935/2004, Tests: BAM)

TEADIT® TF 1590 (Approvals: TA Luft, Blow-Out, FDA, EU 1935/2004, DVGW, Air Liquide, KTW, ABS, Tests: BAM)

TEADIT® TF 1570 (Approvals: TA Luft, Blow-Out, FDA, ABS, EU 1935/2004, Tests: BAM)

Braided gland-packings: TEADIT® 2005 FDA (FDA, EU Regulation 1935/2004), TEADIT® 2006 FDA (FDA)



GASKET SHEETS



Sealing for a safer and greener tomorrow

P 28



@ TEMP 24 SH TEADIT 30 S TAMIO 30 SH

TEADIT PL100 DIN 28091 ADIT PL100 TEMPO PL100 TEADIT PL10 TF-G-O DIN 280 DIN 28091 T PL100

HADIO TF 1570

@ IMIII TF 1570

@ TAN 1580 TEALON TF 1580 TF-M-O DIN 28091 TEALON TF 1580

PIAMP TF 1580

(A) TEMP TF 1590

TF-M-O DIN 28091 TEALON TF 1590 TAMP TF 1590

TEALON TF 1590

O DIN 26091 DIT NA 1006

T NA 1006

(A) TENTO NA 1006

TEADIT NA 1

TEADIT NA 100 FA-AZI-O DIN 2809

			ePT	FE		Structur	ed PTFE	
ТҮРЕ			TEADIT® 24 SH	TEADIT® 30 SH	TEADIT® PL 100	TEADIT® TF 1570	TEADIT® TF 1580	TEADIT® TF 1590
	Composition		100 % PTFE	100 % PTFE	PTFE with hollow glass micro spheres	PTFE with hollow glass micro spheres	PTFE with Barium Sulfate	PTFE with Silica
	Tests Approvals		BAM FDA, TA Luft, Blow-out test (VDI 2200), EC 1935/2004, EU 10/2011, USP VI, EN13555, ABS Product Approval, DVGW, WRAS, NSF/ANSI/CAN 61*	BAM FDA, TA Luft, Blow-out test (VDI 2200), EN13555, EC 1935/2004, EU 10/2011, NSF/ANSI/CAN 61*, USP VI, DVGW, WRAS, ABS Product Approval	EN13555, Blow-out test (VDI 2200), FDA Conformity	BAM FDA, TA Luft, Blow-out test (VDI 2200), ABS Product Approval, EN13555, EC 1935/2004, EU 10/2011	BAM FDA, TA Luft, DVGW, Blow-out test (VDI 2200), ABS Product Approval, EN13555, EC 1935/2004, EU 10/2011	BAM FDA, TA Luft, EC 1935/2004, EU 10/2011, DVGW, Blow-out test (VDI 2200), EN13555, ABS Product Approval
	Colour		white	white	white	blue	off - white	fawn
	Tensile Strength A	ASTM F 152	> 20 MPa	> 25 MPa	14 MPa	14 MPa	14 MPa	14 MPa
	Compressibility A	ASTM F 36	> 45 %	> 45 %	50 %	25 - 40 %	4 - 10 %	5 - 15 %
	Recovery A	ASTM F 36	> 10 %	> 10 %	> 16 %	> 30 %	> 40 %	> 40 %
	Leakage (TA Luft) V	/DI 2440	2,6 ·10 ⁻⁷ mbar l/ _{sm}	8,3 .10 ⁻⁷ mbar l/ _{sm}	1,1 .10 ⁻⁵ mbar l/ _{sm}	3,7 .10 ⁻⁶ mbar l/ _{sm}	5,9 .10 ^{-7 mbar l} /sm	1,1 .10 ^{-6 mbar l} / _{sm}
	Operating Temp. Range	e (Peak)	-268 to 260 ℃	- 268 to 260 °C	- 268 to 260 °C	- 268 to 260 ℃	- 268 to 260 °C	- 268 to 260 °C
	Operating Pressure (Pe	eak)	Vacuum to 200 bar	Vacuum to 200 bar	Vacuum to 55 bar	Vacuum to 55 bar	Vacuum to 83 bar	Vacuum to 83 bar

Description:

Dimensions:

24 SH / 30 SH

TF 1570

1,0 mm

1,0 mm

1500 x 1500 mm

1500 x 1500 mm

1200 x 1200 mm

TF 1580 / TF 1590

1500 x 1500 mm

1,5/2,0/3,0 mm

1200 x 1200 mm

1,5/2,0/3,0/4,8/6,4 mm

0.5/1.0/1.5/2.0/3.0/

4,0/5,0/6,0/9,0 mm

TEADIT® 24 SH and 30 SH are gasket sheets produced from 100 % pure, multidirectionally expanded PTFE (Polytetrafluoroethylene).

Advantages:

- Universally employable gasket sheet for all applications. It is suitable for all types of flanges, nearly all media, a wide Temperature range and even for applications with the toughest demands on purity. It is inherently clean and nontoxic.
- Better creep resistance at higher temp. compared with other PTFE gaskets.
- Excellent malleability.
- Gaskets cut from TEADIT® SH sheets are dimensionally stable.
- TEADIT® SH sheets are quick & simple to install.
- Can be stored indefinitely.

TEADIT® 30 SH

- The newly developed TEADIT® 30 SH gasket sheet provides, due to its much more homogeneous and considerably finer fibrillation, a drastically improved creep resistance, especially at elevated
- With TEADIT® 30 SH it is possible to make easy flange calculations according to EN 1591-1:2014 for all dimensions.

temperature (°C)

Description:

PL 100 has the highest compressibility of all TF-sheets, comparable to that of ePTFE material. It is produced from virgin PTFE resin filled with hollow glass micro-spheres.

Advantages:

- particularly well suited for use with uneven and / or older flanged joints.
- suitable for service with a wide variety of aggressive
- · easy to cut.
- · excellent malleability.

Description:

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. TF1570 is produced from virgin PTFE resin filled with hollow glass micro spheres.

Advantages:

- Suitable for service with a wide variety of aggressive fluids.
- High compressibility.
- · Excellent malleability.
- · Quick and simple to install.

Description: TF 1580 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. TF1580 is produced from virgin PTFE resin filled with Barium Sulfate.

Advantages:

- Suitable for all types of flanges, nearly all media.
- Suitable for service with a wide variety of aggressive fluids, hydrocarbons, moderate acids and strong caustics.
- The high purity of this gasket sheet makes it perfectly suitable for the food and pharmaceutical industry.
- · Quick and simple to install.

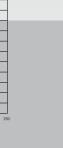
Description:

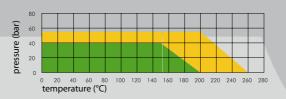
TF 1590 is a structured PTFE -Gasket - Sheet manufactured by a unique process which provides a high level of fibrillation to overcome the creep relaxation and cold flow problems associated with normal (skived or moulded) PTFE sheets. TF1590 is produced from virgin PTFE resin filled with

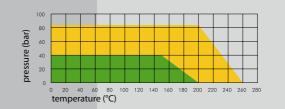
Advantages:

- Suitable for services with high pressures and temperature.
- · Suitable for service with a wide variety of aggressive fluids especially strong acids.
- TF 1590 is quick and simple to install.









All technical data and recommendations given are based on our experiences. However, we do not undertake any liability whatsoever. All data and values have to be checked by the user, since the effectiveness of a seal can only be judged correctly by evaluating all data and parameters directly on site. The stated parameters of all products are approximate and may be mutually influenced if occuring together. We suggest you contact us in the case of special applications.



O DIN 28091 T NA 1006

TEADIT NA 100 @ TEIII NA 1006

Z1-O DIN 28091 T NA 1006 TEADIT NA 10 TENETO NA 1005

TEADIT NA 10 (4) TENTO NA 1002EU O DIN 28091 NA 1002 EU

TO NA 1



		Compressed fibre sheets				
TEADIT® NA 1006	TEADIT® NA 1005	TEADIT® NA 1002EU	TEADIT® NA 1122	TEADIT® NA 1100		ТҮРЕ
A blend of fibers bonded with Nitrile rubber (NBR)	A blend of aramid and other synthetic fibers bonded with Nitrile rubber (NBR)	Aramid fibres bonded with Nitrile rubber (NBR)	Inorganic fibres and special fillers, bonded with nitrile rubber (NBR)	Graphite and carbon fibres, bonded with Nitrile rubber (NBR)		Composition
ABS Product Approval, WRAS	ABS Product Approval, Flame-resistance ISO 19921	BAM KTW, TA Luft, WRAS, Blow-out test (VDI 2200), ABS Product Approval, Flame-resistance ISO 19921, DVGW, DVGW HBT, EN13555	ABS Product Approval	DVGW, TA Luft, Blow-out test, EN13555, (VDI 2200), ABS Product Approval		Tests Approvals
light green	blue	green	black	black		Colour
4 MPa	11,5 MPa	12 MPa	9 MPa	15 MPa	ASTM F 152	Tensile Strength
10 - 20 %	7 - 17 %	5 - 15 %	7 - 17 %	5 - 15 %	ASTM F 36	Compressibility
> 35 %	> 45 %	> 50 %	> 40 %	> 50 %	ASTM F 36	Recovery
		5,5 .10 ⁻⁷ mbar l/ _{sm}		1,87 .10 ^{-7 mbar l} /sm	VDI 2440	Leakage (TA Luft)
max. 200 °C (210 °C)	max. 240 °C (400 °C)	max. 260 °C (400 °C)	max. 430 °C (550 °C)	max. 270 °C (450 °C)	Operating	g Temp. Range (Peak)
max. 30 bar (50 bar)	max. 50 bar (110 bar)	max. 80 bar (110 bar)	max. 102 bar (150 bar)	max. 70 bar (130 bar)	Oper	ating Pressure (Peak)

Description:

TEADIT® style NA-1006 is a nonasbestos jointing-sheet material produced from a blend of fibers bonded with Nitrile rubber (NBR). It is a commercial fibre sheet grade for low to medium pressures and temperatures. It is being manufactured by means of a hot calender process.

TEADIT® maintains a quality management system that is certified according to DIN EN ISO

Advantages:

- It is a commercial fibre sheet grade for low to medium pressures and temperatures.
- Suitable for water, oils and acids in mild service.

Description:

TEADIT® style NA-1005 is a compressed non-asbestos jointing-sheet material produced from a blend of aramid and other synthetic fibers bonded with Nitrile Rubber (NBR). NA-1005 is a general purpose material with very good mechanical, temperature and chemical properties. It is being manufactured by means of a hot calender process. TEADIT® maintains a quality ma-

nagement system that is certified according to DIN EN ISO 9001.

Advantages:

- It is a general purpose material with very good mechanical, temperature and chemical properties.
- Suitable for sealing petroleum derivatives, water, chemical products in general.
- Excellent cost-performance ratio. • Recommend as insert for PTFE envelope gaskets.

Description:

TEADIT® style NA-1002EU is a highend compressed non-asbestos jointing-sheet material made of aramid fibers and bonded with nitrile (NBR) rubber. The material has excellent mechanical, temperature and chemical properties. It is being manufactured by means of a hot calender process.

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

Advantages:

- The material has excellent mechanical, temperature and chemical properties.
- Suitable for sealing petroleum derivatives, water, saturated steam, gases or chemical products in general. Exeptional performance in gas applications.

Description:

TEADIT® style NA-1122 is a compressed non-asbestos sheet gasket material produced from a combination of inorganic fibres and special fillers, bonded with nitrile rubber (NBR). It is being manufactured by means of a hot calender process.

TEADIT maintains a quality management system that is certified according to DIN EN ISO 9001. TEA-DIT style NA-1122 is also available with wire reinforcement.

Advantages:

- Developed to exhibit superior thermal stability during extreme thermal cycling applications.
- Specially recommended for saturated and superheated steam.
- Very effective in sealing liquids, Ethanol, Petroleum derivates and other fluids.

Description:

TEADIT® style NA-1100 is a universal jointing sheet with high temperature and pressure resistance, manufactured from graphite and carbon fibre, bonded with Nitrile rubber (NBR). It is being manufactured by means of a hot calender process. TEADIT maintains a quality management system that is certified according to DIN EN ISO 9001.

Advantages:

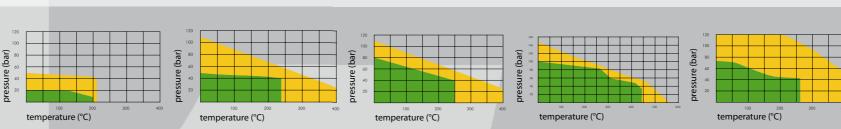
- The material has excellent mechanical, temperature and chemical properties, because Carbon fibres provide max. strenght and stability.
- TEADIT style NA-1100 is suitable for sealing petroleum derivatives, water, saturated steam, solvents, gases and chemical products in general.

Dimensions: 1500 x 1600 mm 1500 x 3200 mm

NA 1006 0,8/1,0/1,5/2,0/3,0 mm

NA 1005 **NA 1002EU** NA 1122 NA 1100

0,5/1,0/1,5/2,0/3,0 mm



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Standard range of service limits Maximum application limits







		Expanded graphite	
ТҮРЕ	TEADIT® GR 1520/GE 1520	TEADIT® GP 1520	TEADIT® GR 1700
Composition	Graphite sheet with plain (GR) or tanged (GE) metal insert	Graphite sheet	Graphite sheet
Tests			BAM
Approvals			Fire Safe according API 607, Blow-Out resistance
Colour	black	black	black
DIN Density		1,0 g/cm ³	1,1 g/cm³
ASTM F 36 Compressibility	40 - 50 % / 30 - 40 %	40 - 50 %	35 %
ASTM F 36 Recovery	10 - 25 % / 15 - 30 %	> 10 %	15 - 20 %
Operating Temp. Range (Peak)	-240 to 450 °C (steam up to 650 °C) inert atmosphere to 800 °C	-240 to 450 °C (steam up to 650 °C) inert atmosphere to 1000 °C	-250 to 480 °C (steam up to 650 °C) inert atmosphere to 800 °C
Operating Pressure	70 bar / 140 bar	30 bar	Vacuum to 250 bar
Carbon	> 98 %	> 99 %	> 98 %
Chloride	< 30 ppm	< 30 ppm	< 25 ppm
Sulphur	< 1000 ppm	< 1000 ppm	< 300 ppm

Description:

TEADIT® GR 1700 is a multilayer high strength graphite sealing sheet designed for high temperature and pressure applications. The sheet is comprised of 0.5 mm thick layers of highly oxidation resistant flexible graphite and 0.05 mm thick plain stainless steel foils.

Advantages:

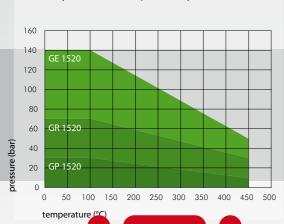
- ideal for critical applications.
- high mechanical strength and blowout resistance.
- wide range of working pressure.
- very low creep relaxation.
- extremely high maximum permissible gasket stress.
- provides an excellent torque retention and high long term sealability.
- superior thermal stability.

Description:

TEADIT® expanded graphite sheets are produced from pure, expanded flexible graphite and do not contain any other fibres or filler materials. Because of their specific structure expanded graphite sheets are particularly suited for applications with extremely high or low temperatures, with highly corrosive and aggressive media and for gas as well as steam applications.

Advantages:

- universally applicable for gases and fluids.
- chemically resistant against most media.
- excellent thermal conductivity.
- can be stored indefinitely.
- do not need anti-stick coating.
- extremely resistant to temperature cycles.



Dimensions:

GP 1520 / GR 1520 / GE 1520 1000 x 1000 mm 1,0 / 1,5 / 2,0 / 3,0 mm

GE 1520 1500 x 1500 mm 1,5 / 2,0 / 3,0 mm

GR 1700 1500 x 1500 mm 1,0 / 1,5 / 2,0 / 3,0 mm



PTFE gasket material • structured PTFE sheets • multidirectionally exp. PTFE sheets • multidirectionally exp. PTFE tapes • monodirectionally exp. PTFE tapes • Braided gland packings • Carbon / Graphite packings • PTFE packings • PTFE / Aramid packings • Aramid packings • Glass packings • Acrylic packings • Ramie packings • Polyimid packings • Novoloid packings • Nomex packings • Preformed packing rings • Compressed fibre sheets • Carbon / Graphite / NBR • Aramid /NBR • Cellulose / NBR • Graphite sheets • Graphite sheets with plain metal insert • Graphite sheets with tanged metal insert • Pure graphite sheets • Gaskets • PTFE envelope gaskets • Cut gaskets • Gaskets with metal eyelets • Double jacketed gaskets • Spiral-wound gaskets • Kammprofile gaskets • Hand- and manhole gaskets • Tank lid gaskets • Braided gasket tapes • Jampak • Injection gun • Jampak injectable compounds • Seal-Cage-System • Expansion Joints • Metallic and Non-Metallic Expansion Joints • Accessories • Various packing cutters • Packing extractors • Circular gasket cutter • and many more...

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STUFFING BOX PACKINGS



Sealing for a safer and greener tomorrow

Multi-directional ePTFE gasket sheet: TEADIT® 24 SH
[Tests: BAM, Approvals: TA-Luft, Blow-Out, FDA, EU 1935/2004, USP Plastic Class VI, DVGW, WRc, ABS]

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		Carbon / Graphite					Carbon / Graphite PTFE					PTFE extrudiert PTFE / Aramid				Aramid		
sty	رام	2000	2202	2001	2200	2235	2236	2005FDA	2006FDA	2124	2007	2024	2022	2017	2070/2070M	2004/2004M	2044	
filam		exp. Graphite		Graphite	Carbon		exp. Graphite/Inconel®	PTFE	PTFE	PTFE	gPTFE	PTFE-extrud.	PTFE-extrud.	gPTFE-Aramid	gPTFE-Aramid	Aramid	spun Aramid	
impreg				Graphite	Graphite	Graphite	Graphite	PTFE	PTFE		g		Graphite	PTFE	g	PTFE	PTFE	
lubric									mineral		silicone	mineral	mineral	silicone	silicone/mineral	silicone/mineral	mineral	
labin	carre																	
bar	rot.	30	30	30	25			20	20		35	10	25	30	35	35	20	
bar	osc.	100	200	100	100			150	30		100			200	250	200	80	
bar	stat.	300	300	300	300	450	450	250		100	200	20	100	200	250	250	150	
m/s	٧	30	20	20	20			5	12		25	4	12	20	25	15	15	
°C	_	-240	-240	-240	-240	-240	-240	-200	-100	-100	-200	-100	-100	-100	-100	-100	-100	
°C	+	+450	+450	+450	+450	+450	+455	+280	+280	+280	+280	+250	+280	+280	+280	+280	+280	
°C	steam	+650 1)		+650	+650	+650	+650											
pH va	alue	0 - 14	0 - 14	0 - 14	0 - 14	0 - 14	0 - 14	0 - 14	0 - 14	0 - 14	0 - 14	0 - 14	0 - 14	2 - 12	0 - 14	2 - 12	2 - 12	
'																		
wat	ter	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
stea	am	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	
neutr. sc	olutions	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
highly dilu	uted acids	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
concentra	nted acids	•	•	•	•	•	•	•	•	•	•	•	•	0	•	0	0	
highly concer	ntradet acids	0	0	0	0	О	0	•	•	•	•	•	•		•			
diluted	alkalis	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
concentrat	ted alkalis	•	•	•	•	•	•	•	•	•	•	•	•		•			
inert	gas	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
acidio	c gas	•	•	•	•	•	•	•	•	•	•	•	•	О	•	0	0	
hydro	ogen	0	0			О	•	•		•	•	•	•	О	•		0	
oxyg	gen						2)			•								
volatile hyd	drocarbon	•	•	•	•	•	•	•	•	•	•	•	•	0	•		0	
solve		•	•	•	•	•	•	•	•	•	•	•	•	•	•	О	•	
amines,	nitriles	•	О	0		•	•	•	•	•	•	•	•	•	•	О	0	
mineral o		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
synth		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
abrasive			О		•			О	О	0	0			•	•	•	•	
bitur								О	О	0	0	•	•	•	•	•	•	
	arnishes	•	•	•	•	•	•	•	•	•		0	0		_/•	_/•	•	

Glossary: • recommended limited usability

rot. = rotating, osc. = oscillating, stat. = static, v = peripheral speedAll values for pressure and speed are maximum limits

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¹⁾ with inert gas up to 1000 °C

²⁾ Type 2236 "oxygen": Usage limited to 60°C. If required, TEADIT® has additional products for Oxygen Services. Contact TEADIT for further details.



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JAMPAK and the Seal-Cage-System

TEADIT® has – with the development of the Seal-Cage-Systems - made the concept of injectable packing compound work correctly and reliably. But not only this, TEADIT® has also

- modified and enhanced the injection gun and its connecting system, which makes injecting the packing compound easier
- developed new versions of packing compound for specific applications
- designed various accessories which make installing and working with the JAMPAK Seal-Cage-System quicker and easier

Benefits of TEADIT® JAMPAK sealants:

- easy to install easy to use
- repacking made easy with the TEADIT® JAMPAK injection gun and helpful accessories
- repacking while equipment is operating no interruption of production, considerably less downtime, longer continuous working periods of equipment
- extremely low coefficient of friction saves on energy, reduces heat build-up and shaft wear
- saves on water and waste water because no flush (cooling water) is required
- operates virtually leakfree
- works well with slightly worn shafts or sleeves because of excellent malleability
- reduces operating costs and extends equipment life

The TEADIT® Jampak Seal-Cage-System consists of the following parts:

- Jampak injection gun kit
- Jampak packing compounds
- Jampak Seal-Cage-System



JAMPAK 27

A blend of high performance gPTFE fibers and chemically resistant lubricants.



JAMPAK 26

A non-staining, non-toxic PTFE fiber blended with FDA-approved lubricants for clean or food grade applications.

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• Seal-Cage-System • Expansion Joints • Metallic and Non-Metallic Expansion Joints • Accessories • Various packing cutters • Packing extractors • Circular gasket cutter • and many more...

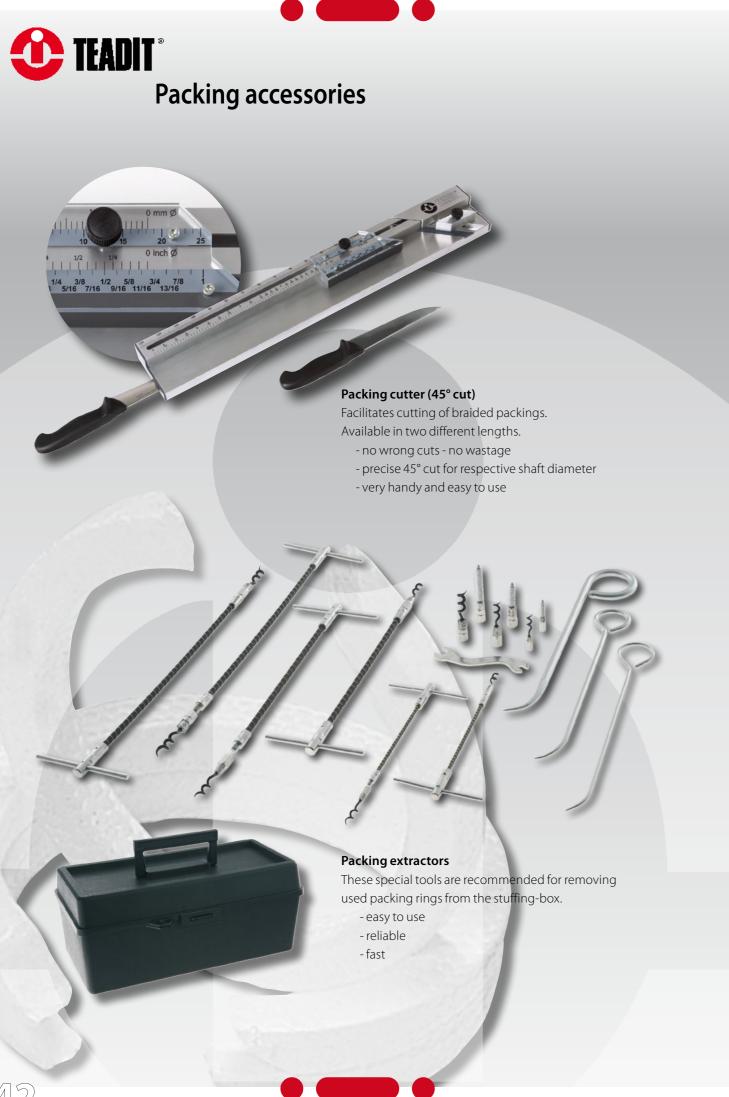


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PACKING STYLE 2236

ISO 15848-1 tightness class A

API 622 average leakage 2 PPMv

Low Emission Valve Stem Packing

for Petroleum and Chemical Process Industry



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CERTIFIED SEALING MATERIALS FOR FOOD, BEVERAGE & PHARMACEUTICAL INDUSTRIES



CERTIFIED SEALING MATERIALS FOR FOOD, BEVERAGE & PHARMACEUTICAL INDUSTRY



Declaration of Compliance - Food and pharmaceutical physiologically harmless

The below mentioned TEADIT® products are suitable for use as a material or article for direct contact with food and API and thus in the application in the pharmaceutical plant. They are corresponding with the following regulations and only consist of materials which are listed in the above-mentioned EU positive list and FDA whitelist.

When used under the intended conditions all migration values are below the indicated limits. Corresponding certificates and test reports of external testing institutes are present. All the TEADIT® products do not contain animal derived ingredients.

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

product group	TEADIT® style	FC)A	Potable Water		EU		US	color	description
	30 SH	21 CFR 177.1550	21 CFR 170.3 (i)	WRAS, NSF/ANSI/CAN 61*	EC 1935/2004	10/2011	EG 2023/2006 (GMP)	USP Class VI	white	100 % PTFE
	24 SH	21 CFR 177.1550	21 CFR 170.3 (i)	WRAS, NSF/ANSI/CAN 61*	EC 1935/2004	10/2011	EG 2023/2006 (GMP)	USP Class VI	white	100 % PTFE
GASKET SHEET	TEALON TF 1570	21 CFR 177.1550	21 CFR 170.39		EC 1935/2004	10/2011	EG 2023/2006 (GMP)		blue	PTFE + glass filler
	TEALON TF 1580	21 CFR 177.1550	21 CFR 170.39		EC 1935/2004	10/2011	EG 2023/2006 (GMP)		white	PTFE + barium sulfate
	TEALON TF 1590	21 CFR 177.1550	21 CFR 170.39	WRAS	EC 1935/2004	10/2011	EG 2023/2006 (GMP)		pink/brown	PTFE + silica
GASKET	28LS-LE	21 CFR 177.1550	21 CFR 170.3 (i)	WRAS, NSF/ANSI/CAN 61*	EC 1935/2004	10/2011	EG 2023/2006 (GMP)	USP Class VI	white	100 % PTFE
	25 BI	21 CFR 177.1550	21 CFR 170.3 (i)	WRAS, NSF/ANSI/CAN 61*	EC 1935/2004	10/2011	EG 2023/2006 (GMP)		white	100 % PTFE
CACKETTADE	24 B	21 CFR 177.1550	21 CFR 170.3 (i)	WRAS, NSF/ANSI/CAN 61*	EC 1935/2004	10/2011	EG 2023/2006 (GMP)		white	100 % PTFE
GASKET TAPE	24 BB	21 CFR 177.1550	21 CFR 170.3 (i)	WRAS, NSF/ANSI/CAN 61*	EC 1935/2004	10/2011	EG 2023/2006 (GMP)		white	100 % PTFE
	24 HD	21 CFR 177.1550	21 CFR 170.3 (i)	WRAS, NSF/ANSI/CAN 61*	EC 1935/2004	10/2011	EG 2023/2006 (GMP)		white	100 % PTFE
DDAIDED DACKING	2005 FDA	21 CFR 177.1550	21 CFR 170.3 (i)		EC 1935/2004	10/2011	EG 2023/2006 (GMP)		white	dry PTFE yarn
BRAIDED PACKING	2006 FDA		21 CFR 170.3 (i)				EG 2023/2006 (GMP)		white	PTFE yarn + mineral oil



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Sealing for a safer and greener tomorrow

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