

PTFE Sheet TEALON TF 1580

TEALON 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. TEALON TF1580 is produced from virgin PTFE resin filled with Barium Sulfate.

Properties:

- **Colour:** off-white (no dye)
- **Size:** Sheets of 1500 mm x 1500 mm in 1.5 mm, 2.0 mm and 3.0 mm thickness
- **Temperature:** -210°C to +260°C
- **Chemical resistance:** chemically inert against all substances (pH 0-14), including the most aggressive lyes and moderate acids. The only exception are molten alkali metals and elemental fluorine at high temperatures and pressures.
- **Operating Pressure:** max. 83 bar
- **Ageing:** TEALON TF 1580 is not subject to ageing or weathering. It can be stored indefinitely.
- **Safety:** TEALON TF 1580 complies to FDA requirements for food, is physiologically harmless and is suitable for oxygen applications.

Approvals

- **FDA:** conforms to the FDA's Perfluorocarbon regulation.
- **TA Luft:** exceeding the requirements of Technical Instruction on Air Quality
- **BAM:** approved for use with oxygen
- **DVGW:** approved for gas and water



Advantages:

- Universal gasket sheet for all applications. It is suitable for all types of flanges, nearly all media, a broad temperature range and even for applications with the toughest demands on purity. It is inherently clean and non-toxic.
- TEALON TF 1580 is suitable for service with a wide variety of aggressive fluids, including hydrocarbons, moderate acids and strong caustics, solvents, water, steam, hydrogen-peroxide, refrigerants, etc.
- The high purity of this gasket sheet makes it excellently suitable for the food and pharmaceutical industry
- TEALON TF 1580 is quick and simple to install. The used gasket can be removed easily and without residue.

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Property	Test Method	Nominal Value	Parameters
Density [g/cm ³]	ASTM D 792	2.9	
Compressibility [%]	ASTM F 36 A	10	$\sigma = 34 \text{ MPa}$
Recovery [%]	ASTM F 36 A	40	$\sigma = 34 \text{ MPa}$
Compressibility ϵ_{KSW} [%]	DIN 28090 - 2	9	$\sigma = 20 \text{ MPa}$
Recovery ϵ_{KRW} [%]	DIN 28090 - 2	1.9	$\sigma = 20 \text{ MPa}$
Tensile strength [MPa]	ASTM 152	14	Room temperature
Creep deformation [%]	ASTM F38	11	
Stress retention [MPa]	DIN 52913	11	30N/mm ² , 150°C, 16h
Sealability [ml/h]	ASTM F 37 A	0.04	0.7 bar
$Q_{\min, 0.01}$ [MPa]	prEN 13555	< 10	He, 40 bar
$Q_{S\min, 0.01}$ [MPa]	prEN 13555	< 10	He, 40 bar
$Q_{\min, 0.001}$ [MPa]	prEN 13555	13	He, 40 bar
$Q_{S\min, 0.001}$ [MPa]	prEN 13555	< 10	He, 40 bar
Q_{crit} [MPa]	prEN 13555	> 240	Room temperature
$Q_{S\text{MAX}}$ [MPa]	prEN 13555	> 240	Room temperature
E_0 [MPa]	prEN 13555	1104	Room temperature
K_1 [1]	prEN 13555	16	Room temperature
Sealability [cm ³ /min]	DIN 3535	< 0.015	N ₂ , 40 bar, 32 MPa
Specific leakage rate L [mbar · l / (s · m)]	VDI 2440 / TA LUFT	$5.9 \cdot 10^{-7}$	He, 1bar, 30 MPa

Since all properties, specifications and application parameters shown throughout this product information 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.

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