



# GORE® GR

## SHEET GASKETING



## Increased residual gasket stress and greater blow-out resistance

GORE® GR sheet gasketing has been developed for a secure flange connection offering an enduring seal for all pipeline and apparatus flange connections made of steel. It consists of pure, high-quality expanded PTFE (ePTFE) that ensures an almost unlimited chemical resistance of the seal.

GORE® GR sheet gasketing is distinguished by its minimum loss of gasket stress (high  $P_{OR}$  value according to EN 13555). This is particularly beneficial when gasketing material is subjected to the stress of temperature cycling, high temperatures and external forces, which can lead to leakage and/or blow-out.

The high strength of the material results in increased pressure and blow-out resistance. The higher rigidity of the material simplifies installation of the gasket. GORE® GR sheet gasketing offers a long-lasting seal on an extremely wide range of steel flange geometries.



### TECHNICAL DATA

#### MATERIAL

100% expanded PTFE (ePTFE) with multidirectionally oriented fibril structure.

#### TEMPERATURE RANGE OF THE MATERIAL

-268°C to +315°C / -450°F to +600°F

#### CHEMICAL RESISTANCE

Resistant to all media (pH 0 – 14), except for molten or dissolved alkali metals and elemental fluorine particularly at high temperatures and pressures.

#### STABILITY

Not subject to ageing within the material's temperature range, UV-resistant and can be stored indefinitely.

#### PHYSIOLOGICAL SAFETY

Physiologically harmless within temperature range of material.

#### OPERATING RANGE

The maximum applicable pressure as well as the maximum safe operating temperature depend mainly on the equipment. Standard pressures range from full vacuum to 40 bar.

### KEY FEATURES

- Made from 100% expanded PTFE (ePTFE)
- High chemical and thermal resistance
- Resistant to ageing
- Physiologically safe
- High strength

### KEY BENEFITS

- Increased residual gasket stress
- Greater blow-out resistance
- High operating safety
- Wide spectrum of applications
- Reliably seals practically all media in the pH range 0 – 14
- Highly conformable to the sealing surface
- Straightforward installation

### TYPICAL APPLICATIONS

- Steel flanges
- Complex flange shapes
- Aggressive media

### TESTS AND CERTIFICATES

- EN 13555
- DIN 28091-3
- TA Luft ("high quality seal") VDI 2440
- Blow-out resistance VDI 2200 (06-2007)
- US standards: HOBT2-cycling, ARLA, ROTT



Data available  
**EN 13555**

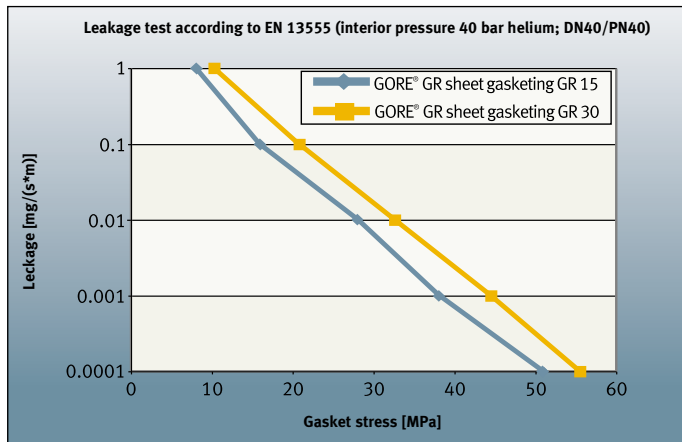
**TA Luft**



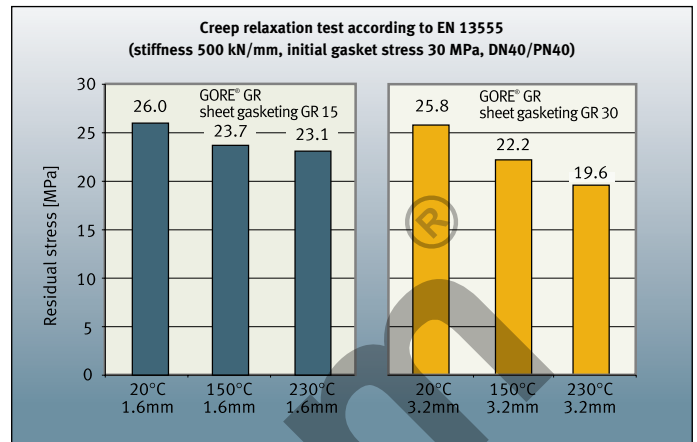
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## LEAKAGE RATES



## RESIDUAL STRESS



## INSTALLATION INSTRUCTIONS

The seals must be installed according to the current ESA guidelines. These guidelines, as well as the torque tables for standard flanges, are available on request.

## AVAILABLE SIZES AND SIZE SELECTION

GORE® GR sheet gasketing is available in the following sizes.

Type	Length x width [mm]	Thickness [mm]
GORE® GR sheet gasketing GR 05	1524 x 1524	0.5
GORE® GR sheet gasketing GR 10	1524 x 1524	1.0
GORE® GR sheet gasketing GR 15	1524 x 1524	1.6
GORE® GR sheet gasketing GR 20	1524 x 1524	2.0
GORE® GR sheet gasketing GR 30	1524 x 1524	3.2
GORE® GR sheet gasketing GR 50	1524 x 1524	5.0
GORE® GR sheet gasketing GR 60	1524 x 1524	6.4

	P <sub>QR</sub> data			Q <sub>Smax</sub> 230°C	Q <sub>min</sub> (0,1)	Q <sub>Smin</sub>
	20°C	150°C	230°C			
GR 15	0.95	0.85	0.77	120 MPa	17 MPa	10 MPa
GR 30	0.89	0.74	0.65	120 MPa	21 MPa	10 MPa

Test according to EN 13555

## QUALITY ASSURANCE

The GORE Quality Management System has been certified by DQS in accordance with ISO 9001. Component suppliers are also integrated into this system.



## ORDERING TEXT

GORE® GR sheet gasketing, thickness (in mm).

FOR INDUSTRIAL USE ONLY. Not for use in food, drug, cosmetic or medical device manufacturing, processing, or packaging operations.

Supplied by:



For detailed selection criteria, technical information, installation guideline and a complete listing of local sales offices please visit [gore.co.uk/sealants](http://gore.co.uk/sealants)

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