

# GORE STA-PURE Pipe Gasket

FOR PHARMACEUTICAL AND FOOD PROCESSING

Style 1500

## Unique Low Stress-to-Seal Design — Ideal for Steel, Glass-Lined and FRP Systems



GORE® STA-PURE® Pipe Gasket Style 1500 delivers and maintains exceptional flange sealing performance in metal, glass-lined steel and FRP piping systems for pharmaceutical, food and beverage processing.

#### **Unmatched Performance and Durability**

Featuring a unique proprietary design of 100% expanded PTFE (ePTFE), Style 1500 gaskets deliver an unmatched combination of performance characteristics:

- Low stress-to-seal, even in the most fragile plastic and glass-lined flanges
- Dimensionally stable ePTFE that provides superior creep resistance
- Chemically inert gasketing that resists highly-aggressive process media
- Dimensionally stable, even at elevated temperatures and pressures

Superior Quality Systems and Material Composition Chemically-inert Style 1500 gaskets are tested and manufactured under quality systems and relevant cGMPs that deliver a consistent material composition and comply with the most demanding requirements including:

- USP Class VI (88) Biocompatibility
- EU Food Contact: (EC) No 1935/2004
- U.S. Food Contact: 21 CFR 174.5(d)

#### System-Wide Suitability

Designed to meet the needs of many different piping materials, Style 1500 gaskets are the ideal choice to standardize gaskets system-wide. They are available in a wide variety of sizes, dimensioned to match industry standard flange-seating geometries.



#### **Key Features**

- 100% proprietary ePTFE
- Resistant to creep and cold flow
- · Chemically inert
- Low bolt load to seal
- Dimensionally stable
- High-temperature resistant
- Consistent material composition

#### **Key Benefits**

- Maintains durable, reliable seals
- Standardize: use one gasket system-wide
- Protects against use of wrong gasket
- Lowers total system costs
- Documented lot traceability



### GORE, STA-PURE, Pipe Gasket

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#### **Technical Data and Properties**

#### Material

100% expanded PTFE, with multi-directional strength

#### **Temperature Stability**

Expanded PTFE is stable in temperature ranges typically found in food and pharma applications: -100°C to 315°C (-148°F to 600°F).

#### **Chemical Resistance**

Resistance to all media in range of pH 0 - 14 (except alkali metals and elemental fluorine, particularly at elevated temperatures).



#### Stress to Seal (Nominal Values)

Qmin<sup>1</sup> 1.5 mm ( $^{1}/_{16}$  in.) = 10 MPa (1450 psi) 3.0 mm ( $^{1}/_{8}$  in.) = 10 MPa (1450 psi) 6.0 mm ( $^{1}/_{4}$  in.) = 10 MPa (1450 psi)

Qsmin<sup>1</sup> 1.5 mm ( $^{1}/_{16}$  in.) = 5 MPa (725 psi) 3.0 mm ( $^{1}/_{8}$  in.) = 5 MPa (725 psi) 6.0 mm ( $^{1}/_{4}$  in.) = 5 MPa (725 psi)

y<sup>2</sup> 1.5 mm ( $^{1}/_{16}$  in.) = 10 MPa (1450 psi) 3.0 mm ( $^{1}/_{8}$  in.) = 10 MPa (1450 psi) 6.0 mm ( $^{1}/_{4}$  in.) = 10 MPa (1450 psi)

m<sup>3</sup> 1.5 mm (1/16 in.) = 1.25 3.0 mm (1/8 in.) = 1.25 6.0 mm (1/4 in.) = 1.25 Creep Relaxation (Nominal Values)

23 °C (73°F) 1.5 mm (1/16 in.) = 0.96 3.0 mm (1/8 in.) = 0.92 6.0 mm (1/4 in.) = 0.85

> 150 °C (302°F) 1.5 mm (1/16 in.) = 0.90 3.0 mm (1/8 in.) = 0.79 6.0 mm (1/4 in.) = 0.61

#### Available Sizes

 $^{1/2}$  in. through 12 in. nominal pipe flanges (NPS) per ASME B16.21 Class 150 and 300

DN 10 – 300, PN2.5, PN6, PN10, PN16, PN25 and PN40 per EN1514

- $^{\rm 2}$  Calculated from the EN13555 2014 Qmin test results for a DN40 PN40 gasket
- <sup>3</sup> Calculated from the EN13555 2014 Qsmin test results for a DN40 PN40 gasket

<sup>4</sup> Based on EN13555 2014 for a DN40 PN40 gasket and an initial gasket stress of 30 MPa (4351 psi)

#### **About Gore PharmBIO Products**

Our technologies, capabilities, and competencies in fluoropolymer science are focused on satisfying the evolving product, regulatory, and quality needs of pharmaceutical and bioprocessing customers, and medical device manufacturers.

GORE® STA-PURE® Gaskets, like all products in the Gore PharmBIO portfolio, is tested and manufactured under stringent quality systems. The high-performance products in this portfolio provide creative solutions to our customers' design, manufacturing, and performance-in-use needs.

#### Compliance Statements

These gaskets comply with relevant requirements regarding food contact substances in the EU and the U.S., and is intended for repeated use in the production of all food types and under all conditions of use, as it complies with relevant regulations.

These gaskets comply with the regulatory and legislative requirements of (EC) No 1935/2004 and the following: (1) (EC) No 2023/2006 on good manufacturing practice for materials and articles intended to come into contact with food; and (2) (EU) No 10/2011 on plastic materials and articles intended to come into contact with food.

These gaskets may be used for repeated contact with all food types and under all conditions of use, as it complies with relevant FDA requirements regarding food contact substances. Consistent with U.S. FDA regulation 21 CFR 174.5(d), each component is composed of substances that are either: (1) listed or affirmed as generally recognized as safe under 21 CFR Parts 182 or 184; (2) covered by, and meeting all relevant specifications and other requirements in an indirect food additive regulation under 21 CFR Parts 175, 176, 177 and 178; or (3) used in accordance with an effective food contact substance notification under section 409(h) of the FFDCA.

#### Supplied By:



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 $<sup>^{\</sup>rm 1}$  Based on EN13555 2014 for a DN40 PN40 gasket, a 0.1 mg/s-m leak rate, ambient temperature and 40 bar internal pressure