

APPROVAL CERTIFICATE

This is to certify, that the underrated products have been approved in accordance with the relevant requirements of the DNV GL Approval System.

Certificate No. **13 560 - 14 HH**

Company **Triangle Fluid Controls Ltd.**

**399 College St E
Belleville, Ontario, K8N 5S7, CANADA**

Product **Glas filled PTFE gasket material**

Type **Durlon 9000**

Technical Data /
Application **Durlon 9000 is a gasket material based on PTFE resin with inorganic filler and manufactured in compressed sheets with thicknesses 0,5 up to 6,0mm.**

Appearance: **blue color – for Durlon 9000**

Filler System: **inorganic**

Density: **2,2 [g/cm³]**

Compressibility (ASTM F36): **8 - 16 [%]**

Recovery (ASTM F36): **40 [%]**

Tensile Strength, across grain (ASTM F152): **13,8 [MPa]**

NOTE 1: The above specified data are for gaskets with 1/16" (1,6mm) thickness.

Creep Relaxation (ASTM F38): **30 [%] for gaskets with 1/32" (0,8mm) thickness**

Temperature:

**min. -212°C,
max. 271°C, continuous max. 260°C**

Working pressure:

68 bar
NOTE 2: The recommended temperatures and pressures applicable for different thicknesses and media are to be according manufacturer's instructions.

RANGE OF APPLICATION:

The gaskets may be used under consideration of the mechanical and physical properties as well as the chemical resistance as follows:
- Ship's piping systems excluding cargo lines on Chemical and Gas Tankers carrying propylene oxide and mixtures of ethylene / propylene oxide.
- Maximum allowable working pressure and temperature according to the specification of the manufacturer.

SOLAS 74 as amended – Chapter II-1-Reg.3.5.2 – asbestos free compliance, ASTM F36, F38, F152.

Approval Standard

Documents

- Asbestos-free cert. of analysis no. b114953 dd. 2014-12-18 (PINCHIN);
- Asbestos-free declaration by the manufacturer/Certificate of Conformance dated 2014-10-17;
- Test Report dated 2014-03-03;
- Initial Survey and Audit Report (DNV GL Montreal) dated 2015-03-05;
- QMS-Cert.(ISO 9001:2008) no. C0031999-IS3 dated 2013-04-19;
- Specification brochure Durlon 9000 Rev.2013-3;
- GL Approval Ref.no: 14-097322.

Remarks

The selection of the gaskets for the corresponding application and the correct installation are to be in accordance with the instructions of the manufacturer.

Valid until **2020-03-10**

Page **1** of **1**

File No. **XI.B.03**

Hamburg, 2015-03-11

DNV GL

www.dnvgl.com



Olaf Drews



Plamen Dinkov