



PLANIFLON PT2105

Composition

Middle rings and Top & Bottom rings: Modified PTFE

Characteristics

Key characteristics of the **Planiflon PT2105** include a specific gravity of 2.15 g/cm³, tensile strength of at least 28 N/mm², and elongation at break of at least 350%. The tensile modulus is at least 600 N/mm². Shrinkage is 3%, while deformation under load is 15%. The material is classified as V-0 for flammability and has a dielectric strength of 2.5 kV/mil. The service temperature range (general service) is from -200°C to 260°C. It is BAM approved for oxygen service.

Applications

The **Planiflon PT2105** is a Chevron-configured seals particularly suitable for applications requiring reliable sealing of stems and seats of industrial valves in sectors such as chemical, petroleum, and pharmaceutical. Suitable for high-pressure and extreme temperature applications.

Tech Data

Properties	Unit	Value
Specific gravity	g/cm ³	2,15
Tensile strenght	N/mm ²	≥ 28
Elongation	%	≥ 350
Tensile modulus	N/mm ²	≥ 600
Shrinkage	%	3
Compressive strength at 1% deformation	N/mm ²	4-5
Deformation under load (24h 15,0 N/mm ² 23°C)	%	15
Deformation under load (100h 15,0 N/mm ² 23°C)	%	17
Deformation under load (Permanent 15,0 N/mm ² 23°C)	%	11
Flammability		V-0
Melt point (initial)	°C	342 ± 10
Melt point (second)	°C	327 ± 10
Dielectric Strenght	kV/mil	2.5
Service Temperature Range (general service)	°C	-200 ÷ 260
BAM Approved for Oxygen Service	[°C ; Bar]	Suitable [60; 30] [200 ; 20]

- Never use the product at its maximum rated temperature and pressure. Consult the manufacturer for further information.
- The data reported in the technical sheet represent the average values of the product and may differ from those of the specific batch delivered.



PLANIFLON PT2105

The **Planiflon PT2105** is a **high-quality PTFE** for stem and seat sealing of industrial valves. The material exhibits high chemical resistance (except for alkalis and hydrofluoric acid) and is suitable for a wide range of pressure applications.

TEST REPORT
on Testing a Nonmetallic Material for Reactivity with Oxygen

Reference Number: 17034631 E
Our Reference: 02-3432
Copy: 1, copy of 2 copies
Customer: Carrara S.p.A. Via Provinciale 1/E 25030 Adro (BS) ITALY
Date of Request: June 19, 2017
Your Reference: PO No. 170615
Receipt of Signed Contract: August 8, 2017
Test Samples: PLANIFLON PT2105, batch 170256
Receipt of Samples: June 27, 2017
Test Date: July 28, 2017 to September 15, 2017
Test Location: BAM - Division 2.1 „Gases, Gas Plants“, building no. 41

Test Procedure or Requirement According to: DIN EN 1257 und ISO 21010
"Oxygen Vessels - Gas/Material Compatibility", Annex of code of practice BS 6344 - BS 6344 (in the current version)
"List of nonmetallic materials compatible with hydrogen" by German Social Accident Insurance Institution for the non-metallic and chemical industry, TRGS 400 Technical Rules for Hazardous Substances "Transport and Carriage - Gefahrguttransport" chapter 3 "Materialauswahl und Gefahrguttransport" and chapter 4 "Schadstoffauswahl und Gefahrguttransport"

All pressures of this report are excess pressures.
This test report consists of page 1 to 3 and annex 1 to 4.
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