



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 and ISO 21010
“Tropfen-Versuch - Gas/Material Compatibility”,
Annex of code of practice BS 684 - (BSI 617: 0)
(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 - Gefahrgutvorschriften”,
chapter 3 “Hazardous Substances and Gefahrgutvorschriften” and
chapter 4 “Schadstoffvorschriften und Gefahrgutvorschriften”

All pressures of this report are excess pressures.
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TEST REPORT



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