



# PLANIFLON PT2105

## Composition

Modified PTFE

## Characteristics

Key characteristics of the **Planiflon PT2105** include a specific gravity of 2.15 g/cm<sup>3</sup>, tensile strength of at least 28 N/mm<sup>2</sup>, and elongation at break of at least 350%. The tensile modulus is at least 600 N/mm<sup>2</sup>. 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 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 <sup>3</sup>	2,15
Tensile strength	N/mm <sup>2</sup>	≥ 28
Elongation	%	≥ 350
Tensile modulus	N/mm <sup>2</sup>	≥ 600
Shrinkage	%	3
Compressive strength at 1% deformation	N/mm <sup>2</sup>	4-5
Deformation under load (24h 15,0 N/mm <sup>2</sup> 23°C)	%	15
Deformation under load (100h 15,0 N/mm <sup>2</sup> 23°C)	%	17
Deformation under load (Permanent 15,0 N/mm <sup>2</sup> 23°C)	%	11
Flammability		V-0
Melt point (initial)	°C	342 ± 10
Melt point (second)	°C	327 ± 10
Dielectric Strength	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.



The information provided in this publication, as well as that supplied to users in other forms, is based on our experience and communicated according to the best knowledge available. However, since numerous factors beyond our knowledge and control may influence the use of the products, no warranty, explicit or implicit, is given regarding such content. The operating limits indicated do not constitute confirmation that these values can be applied simultaneously. Avoid using the product at the maximum temperature and pressure limits. The maximum temperature is sustainable only for short periods under specific conditions. Specifications may be changed without notice. The images in the DS may not accurately represent the product's color and/or marking.



## 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.

**BAM**  
Bundesanstalt für  
Materialprüfung  
and Prüfung

**TEST REPORT**  
On Testing a Nonmetallic Material for Reactivity with Oxygen

Reference Number: 07034603 E  
Our Reference: 02-1442  
Copy: 1 copy of 2 copies  
Customer: Carrara S.p.A.  
Via Provinciale 1/E  
25030 Adro (BS)  
Italy, BN

Date of Request: June 19, 2017  
Your Reference: PO No. T07035  
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 4, room 401

Test Procedure or Requirements According to: DIN EN 1996-1-10:2010  
(in the current version)  
"General rules - Chemical compatibility";  
Annex of code of practice M 034-1(BG) 017-0  
"List of nonmetallic materials for use with oxygen";  
Annex of code of practice M 034-1(BG) 017-0  
"List of nonmetallic materials for use with oxygen";  
TRGS 407 Technical Rules for Hazardous Substances  
"Regulation on the safe handling of oxygen";  
chapter 3 "Informationstransfer und Gefährdungsbeurteilung" and  
chapter 4 "Schutzaufnahmen bei Tätigkeiten mit Gasen"

All pressures of this report are excess pressures.  
This test report consists of page 1 to 3 and annex 1 to 4.  
This test report may only be published in full and without any additions. A complete written consent shall be obtained from the test laboratory before the publication or any extracts. The content of this test report refers exclusively to the objects/materials tested.  
The English version of this test report is the only version that is issued exclusively.  
2016-09 / 2016-09-17

Sicherheit in Technik und Chemie

**TEST REPORT**



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