



# 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 strenght	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 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 to the maximum temperature and pressure associated. 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 in this publication, as well as any additional information provided to users, is based on experience and is shared to the best of our current knowledge. However, due to numerous factors beyond our knowledge and control that may affect the use of these products, no warranties are provided or implied regarding this information. The operating limits presented in this publication do not imply that these values can be applied simultaneously. Do not use the product at the maximum temperature and pressure values simultaneously. The maximum temperature is suitable only for short-term exposure under specific conditions. Specifications are subject to change without prior notice. The picture in the DS may not accurately depict the exact color and/or markings of the product.



## 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** 17034693 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. 170675  
**Receipt of Signed Contract** August 6, 2017  
**Test Samples** PLANIFLON PT2105,  
batch 170256  
**Receipt of Samples** June 27, 2017  
**Test Date** July 26, 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 1259 und ISO 21070  
"Creep Viscosity - Gas/Material Compatibility",  
Annex of code of practice M 234 - (BCI 617-5)  
"List of nonmetallic materials compatible with gases", by German Social  
Accident Insurance Institution for the non-metallic and chemical industry,  
TRGS 407 Technical Rules for Hazardous Substances  
"Transport and Carriage - Gefahrguttransport",  
chapter 3 "Informationsermittlung und Gefahrgutbeurteilung" and  
chapter 4 "Schadensmaßnahmen bei Unfällen von Gasen"

All pressures of this report are excess pressures.  
This test report consists of page 1 to 9 and annex 1 to 4.  
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**TEST REPORT**

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