

# Flon-Chem®-1023 Black

**FLON-CHEM®-1023-BLACK** a filled compound based on Modified PTFE containing special filler that makes the material antistatic and electrically conductive.



## PRODUCT CHARACTERISTICS:

It is suitable for all of the chemicals throughout the pH range (0-14) with the exception of molten alkali metals, fluorine gas, hydrogen fluoride or materials that can generate these.

**It increases the already wide range of application of virgin PTFE . Lower permeability to gases and deformation under load greater elastic recover and mechanical properties open up entirely new possibilities of application in several fields such Chemical , Petrochemical, Automotive, mechanical, Aeronautic, semiconductor and Food industry.**

**FLON-CHEM®-1023-BLACK** thanks to its characteristics is used as a static seal and dynamic gaskets, flanges, coatings, where the use of a conductive material is necessary (ATEX). Besides being suitable for contact with food is also used in Food & Pharma industry

## FDA COMPLIANCE:

**FLON-CHEM®-1023-BLACK** It complies with FDA regulation 21 CFR 177.1550 for food contact

**TYPICAL PROPERTIES:**

PROPERTIES	TEST METHOD	UNITS	VALUE
<b>PHYSICAL &amp; MECHANICAL</b>			
Color - Specific Gravity	g/cm <sup>3</sup>	ASTM D792	Black - 2,14 - 2,18
Hardness Shore D	Shore D	ASTM D2240	>54
Tensile Strength	N/mm <sup>2</sup>	ASTM D4745	>30
Elongation	%	ASTM D4745	>350
Deformation under load (after 24 hrs at 13,7 N/mm <sup>2</sup> )	%	ASTM D621	9 - 12
Permanent Deformation (after 24hrs relaxation)	%	ASTM D621	4,5 - 6
Coefficient of dynamic friction	/	ASTM D1894	0,06
<b>THERMAL</b>			
Working temperature min/max	°C	\\	-200 / +260
Coefficient of linear thermal expansion from 25 to 100°C	10-5/°C	ASTM D696	12 - 14
Thermal Conductivity	W/m*K	ASTM C177	0,34
<b>ELECTRICAL</b>			
Volume Resistivity	Ω x cm	ASTM D256	10 <sup>4</sup>
Surface Resistivity	Ω	ASTM D256	10 <sup>3</sup>

Note : These are typical properties and not used for specification purpose

**PRODUCT PROPERTIES:**

- Antistatic
- Very good electrical conductivity
- Very good mechanical properties
- UV resistance
- Exceptional temperature resistance
- Excellent chemical resistance
- Extremely non-adhesive
- Reduced friction & wear;  
Low friction behavior
- High degree of hydrophobicity

All information in this document is based on years of experience in manufacture and use of the discussed products. Since sealing performance in the joint is subject to multiple factors such as mounting method, system parameters, and sealed medium, technical parameters specified herein are of informative nature only and cannot be used as grounds for any claims any special uses of products are subject to consulting with the manufacturer.