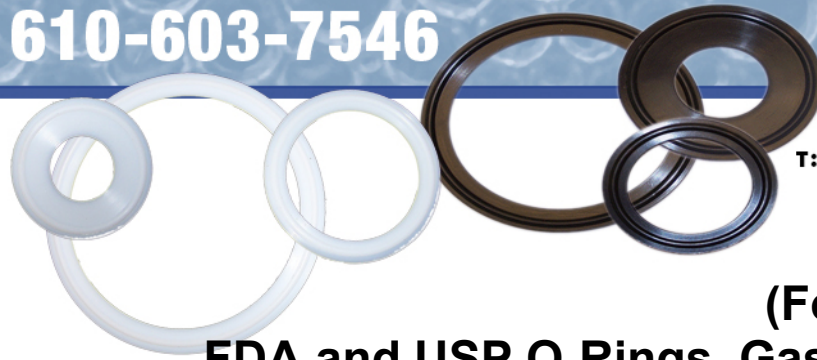


# Sanitary Seal Division

610-603-7546



619 FRANKLIN STREET, WEST READING, PA  
T: 610-603-7546 F: 610-603-7557 E: INFO@PTIPRO.COM



## Sanifluor<sup>®</sup> 1000

(Formulated Aflas<sup>®</sup> Elastomer)

**FDA and USP O-Rings, Gaskets, Seals and Valve Seats  
Specifically Compounded For Pharmaceutical and Sanitary Applications**

- Excellent Steam and Caustic Resistance up to 400° F (204° C)
- Very Good Chemical Resistance
- LOW TOCs and Metal Extractables
- Longer Life in SIP, CIP and WFI applications
- FDA & USP Class VI Compliant

O-Rings, Gaskets and Seals produced from Sanifluor<sup>®</sup> 1000 have excellent chemical, heat and steam resistance. They provide superior performance in hot water, steam and virtually all caustics making them ideal for pharmaceutical, medical, biotechnology, food, beverage and cosmetic manufacturers who use steam or caustic chemicals or a combination of both in their sterilization processes. These very aggressive conditions can be too harsh for commonly used sealing materials such as Silicone, EPDM and FKM. Sanifluor<sup>®</sup> provides excellent performance in SIP (steam in place), CIP (clean in place) and WFI (water for injection) applications.

Sanifluor<sup>®</sup> 1000 is available in all sanitary gasket sizes for Tri-Clover<sup>®</sup> Tri-Clamp<sup>®</sup> fittings, AS-568A O-Ring sizes and custom shapes.

Sanifluor<sup>®</sup> 1000 is formulated for use in gaskets and seals where both USP and FDA compliance is required. \*\* Sanifluor<sup>®</sup> 1000 meets the extractive requirements of FDA 21CFR177.2600. It also complies with 3-A Sanitary Standard for multiple-use rubber materials. Additionally, Sanifluor<sup>®</sup> 1000 has been tested per the United States Pharmacopeia (USP) testing protocols <87> and <88> and is compliant with the requirements of the USP Class VI Polymer.

### TYPICAL PROPERTIES

Physical Properties	ASTM Method	Typical Value
Color		Black
Specific Gravity	D297	1.65
Hardness, Shore A. Points	D2240	80
Elongation @ Break %	D1414	170
Modulus @ 50% Elongation, psi	D1414	845
Modulus @ 100% Elongation, psi	D1414	1710
Tensile Strength @ Break, psi	D1412	2600
Service Temperature Range, °F		23° to 450°F
Service Temperature Range °C		-5°C to 230°C
Compression Set @ 25% Deflection 70Hours @ 392° F/200°C, in Air % of original deflection	D395 Method B	30

### All tests conducted on AS 568 (-214) O-rings

\*\*On July 23, 2009, The U.S. Food and Drug Administration (FDA) confirmed the compliance of Sanifluor 1000 for repeated use in contact with food by publication of Food Contact Substance Notification (FCN) 000891

Statements and recommendations in this publication are based on our experience and knowledge of typical applications of this product and shall not constitute a guarantee of performance nor modify or alter our standard warranty for this product. Prior to actual use it is highly recommended that suitable tests be run to determine this product's suitability in a specific application. This is critical where failure could result in injury or damage.

AFLAS<sup>®</sup> is a registered trademark of Asahi Glass Co., Ltd

Sanifluor<sup>®</sup> is a registered trademark of Process Technologies, Inc.



## Compatibility Guide for Common Chemicals Used in CIP Processes

	EPDM	BUNA-N	Silicone	FKM	Sanifluor <sup>®</sup>	Viton <sup>®</sup> X	PTFE	Tyfluor
Acetone	1	4	4	4	4	2	1	1
Ammonia	1	2	2	4	4	4	1	1
Hydrochloric Acid	3	4	4	1	1	1	1	1
Hydrofluoric Acid	3	4	4	3	2	3	1	1
Hydrogen Peroxide	4	2	2	2	1	1	1	1
Isopropyl Alcohol	1	2	1	1	1	1	1	1
Nitric Acid	2	4	2	1	2	1	1	1
Phosphoric Acid	1	2	2	1	1	1	1	1
Sodium Hydroxide	1	2	2	2	1	1	1	1
Sodium Hypochlorite	2	2	2	1	1	1	1	1
Sulfuric Acid	2	3	4	1	1	1	1	1
Steam to 400°F (204°C)	3	4	4	4	1	3	3	3

1 – Excellent 2 – Good 3 – Limited 4 – Not Recommended

Viton<sup>®</sup> is a registered trademark of DuPont Performance Elastomers

## Part Numbers for High Performance Sanitary Gasket Materials

	1"	1½"	2"	2½"	3"	4"
Viton <sup>®</sup> X	40MP-FLX 1	40MP-FLX 1½	40MP-FLX 2	40MP-FLX 2½	40MP-FLX 3	40MP-FLX 4
Sanifluor <sup>®</sup>	40MP-FEP 1	40MP-FEP 1½	40MP-FEP 2	40MP-FEP 2½	40MP-FEP 3	40MP-FEP 4
Tyfluor <sup>™</sup>	40MP-TY 1	40MP-TY 1½	40MP-TY 2	40MP-TY 2½	40MP-TY 3	40MP-TY 4

## Part Numbers for Standard Sanitary Gasket Materials

	1"	1½"	2"	2½"	3"	4"
Buna-N	40MP-U 1	40MP-U 1½	40MP-U 2	40MP-U 2½	40MP-U 3	40MP-U 4
Silicone White	40MP-FXW 1	40MP-FXW 1½	40MP-FXW 2	40MP-FXW 2½	40MP-FXW 3	40MP-FXW 4
Silicone Clear	40MP-FXC 1	40MP-FXC 1½	40MP-FXC 2	40MP-FXC 2½	40MP-FXC 3	40MP-FXC 4
EPDM	40MP-E 1	40MP-E 1½	40MP-E 2	40MP-E 2½	40MP-E 3	40MP-E 4
Viton <sup>®</sup> /FKM	40MP-SFY 1	40MP-SFY 1½	40MP-SFY 2	40MP-SFY 2½	40MP-SFY 3	40MP-SFY 4
PTFE	40MP-G 1	40MP-G 1½	40MP-G 2	40MP-G 2½	40MP-G 3	40MP-G 4