

Innovations in Fluid Sealing



## TECHNICAL DATA SHEET

# INFLON MODIFIED PTFE SHEET INMARCO TYPE 605

#### Description:

**TYPE 605** is an advanced material with improved creep resistance used in chemical process industries. Due to improved creep resistance this material has increased stiffness even at elevated temperatures. The modified PTFE components can be used for higher pressure conditions. Modified PTFE allows better high voltage insulation giving new opportunity to improve performance particularly in electrical applications. The vessel linings, tubings, sealing materials, expansion joints, made out of modified PTFE have more life & less/near zero leakage due this enhanced permeation resistance.

#### Operational Parameters:

Properties	Test Method	Unit	Values	
MECHANICAL				
Density	ASTM D 792	gm/cc	2.15 - 2.2	
Tensile Strength	ASTM D 638	kgf/cm <sup>2</sup>	300 - 325	
Elongation @ Break	ASTM D 638	%	400 – 450	
Compressive Strength	ASTM D 695	kgf/cm <sup>2</sup>	45 – 55	
Compressive Modulus	ASTM D 695	kgf/cm <sup>2</sup>	4000 – 4500	
Hardness	ASTM D 2240	Shore D	58 - 63	
Continuous service temp. @ atmospheric pressure	ASTM D 648	°C	-250 TO +260	
THERMAL				
Thermal Conductivity (max.)	ASTM D 5930	10 <sup>x1</sup> cal cm S°C	6	
Linear Thermal Expansion (max.)	ASTM D 696	%	Axial	Radial
30 – 150°C			1.5	1.5
30 – 200°C			2.4	2.3
30 – 250°C			3.4	3.6
ELECTRICAL				
Dielectric Strength	ASTM D 149	Kv/mm	30 – 35	
Volume Resistivity	ASTM D 257	ohm cm	>10 <sup>20</sup>	
Surface resistivity	ASTM D 258	ohm	>1018	
Water Absorption (max.)	ASTM D 570	%	0	
CHEMICAL				
Permeability	ASTM D 543	%	0.01	

### Availability:

Sheet size : 1000mm x 1000mm

: 1500mm x 1500mm

Thickness: 0.5mm, 1mm, 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm

All information and recommendations given in this technical data sheet are correct to the best of our knowledge. However, in view of the wide variety of application and operating conditions one cannot draw the final conclusion in all application cases regarding the behavior of compounds. The above information can only serve as a guideline.

#### **INMARCO FZC**

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