

Innovations in Fluid Sealing



TECHNICAL DATA SHEET

INFLON BRONZE FILLED PTFE SHEET INMARCO TYPE 604

Description:

TYPE 604 is a Virgin PTFE with 40% bronze. This alloy is used in certain percentage as a filler to enhance the properties like thermal conductivity of PTFE, creep resistance and to facilitate lubrication.

Operational Parameters:

Properties	Test Method	Unit	Values	
MECHANICAL				
Density	ASTM D 792	gm/cc	3.0 – 3.2	
Tensile Strength	ASTM D 638	kgf/cm ²	125 - 300	
Elongation @ Break	ASTM D 638	%	225 – 325	
Compressive Strength	ASTM D 695	kgf/cm ²	85 – 100	
Compressive Modulus	ASTM D 695	kgf/cm ²	8000 – 8500	
Hardness	ASTM D 2240	Shore D	63 - 68	
Continuous service temp. @ atmospheric pressure	ASTM D 648	°C	-250 TO +260	
THERMAL				
Thermal Conductivity (max.)	ASTM D 5930	10 ^{x1} cal cm S°C	17	
Linear Thermal Expansion (max.)	ASTM D 696	%	Axial	Radial
30 – 150°C			1.15	0.95
30 – 200°C			1.85	1.55
30 – 250°C			2.55	2.25
ELECTRICAL				
Dielectric Strength	ASTM D 149	Kv/mm	Conductive	
Volume Resistivity	ASTM D 257	ohm cm	>107	
Surface resistivity	ASTM D 258	ohm	>109	
Water Absorption (max.)	ASTM D 570	%	0	
CHEMICAL				
Permeability	ASTM D 543	%	0.01	

Recommendations:

- High compressive strength.
- Excellent wear resistance.
- Very low cold flow.
- Good thermal conductivity.

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.