DOTMAR
ENGINEERING PLASTICS

MATERIAL DATA SHEET

TICOMP S

A FLUORO-POLYMER COMPOSITE CONTAINING REINFORCING FILAMENTS AND LUBRICANTS WHICH OPTIMISE ADHESIVE WEAR RESISTANCE AT LOADS OF UP TO 4 MPA AND SURFACE SPEEDS OF 3.2 M/SEC.

Features

TICOMP S can be cost effectively used for static and rotary seals running on softer metal surfaces like stainless steel. Shaft sleeves for vertical spindle and horizontal centrifugal acid pumps are also prime applications. Gaskets and wear strips also benefit from the outstanding properties of TICOMP S.

Benefits

TICOMP S has unique advantages over other inorganic and polymer filled materials:

- Excellent chemical resistance, closely matching that of Virgin PTFE
- Service temperature under load can be rated up to 210°C depending on media, loads and speeds
- Excellent thermal stability
- Excellent ductility combined with lowfriction optimises adhesive wear resistance
- Alloy constituents are FDA approved

Typical Applications

- High duty seals
- Low deformation gaskets
- Bearings at up to 240°C

DELIVERY PROGRAM

FEATURE	SIZE
Rod	30-40mm Dia in 300mm lengths 12-40mm Dia in 2000mm lengths
Sheet	Made to order 610x610mm up to20mm
Tube	Made to order OD36 to 639mm,150 to 300mm lengths*, max 30mm wall

*Varies for each size depending on tooling

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PHYSICAL PROPERTIES

TICOMP S		
TYPICAL PROPERTIES	UNIT	VALUE
Tensile Strength	MPa	29
Elongation at Break	%	305
Hardness		64
Co-eff of Thermal Expansion 10-30°C 30-100°C 100-170°C	$10\text{-}^{6}K\text{-}^{1}$	 194 83 99
Max Short Term Temp	°C	300
Operating Temp	°C	260
Volume Resistivity		$>10^{15}$
Dielectric Constant		2.25
K Factor 4m/s, 1um, 1 N/mm^2 4m/s, 1um, 5 N/mm^2 0.5m/s, 1um, 1 N/mm^2 0.5m/s, 1um, 5 N/mm^2 0.5m/s, 2um, 5 N/mm^2 150°C 0.5m/s, 1um, 1 N/mm^2 200°C 0.5m/s, 1um, 1 N/mm^2	mm^3/Nm	 $4.6x10^{-6}$ $5.3x10^{-6}$ $2.8x10^{-6}$ $1.0x10^{-6}$ $2.2x10^{-6}$ $1.2x10^{-6}$ $1.1x10^{-6}$
Coefficient of Friction 4m/s, 1um, 1 N/mm^2 4m/s, 1um, 5 N/mm^2 0.5m/s, 1um, 1 N/mm^2 0.5m/s, 1um, 5 N/mm^2 0.5m/s, 2um, 5 N/mm^2 150°C 0.5m/s, 1um, 1 N/mm^2 200°C 0.5m/s, 1um, 1 N/mm^2		 0.29 0.26 0.2 0.23 0.18 0.39 0.15