

# Turcon®

## T40

**SPECIALLY ENGINEERED POLYMER FOR DEMANDING APPLICATIONS**

**A high grade composition of virgin PTFE compounded with carbon fibre.**

### THERMOPLASTIC BASE PTFE

PTFE

### COLOUR

Grey

\*) The Colour of the material may have variations in shading.

### PROJECTED SERVICE TEMPERATURES

**Minimum\*** -200°C

**Maximum\*** +260°C

\*) Maximum and minimum service temperature are given only as indication and can vary strongly on product shape and application conditions.

### TYPICAL APPLICATIONS

For lubricating and non-lubricating fluids

Linear and rotary motion

High frequency and short strokes

Water hydraulics

Surface texture is only suitable for gas sealing when lubricated with fluid

### INDUSTRY SPECIFICATION / ASTM CALLOUTS

ASTM callouts not specified.

1\*) Material is approved according to ASTM testing

2\*) Material was tested independent of ASTM methods.

Results are only to be considered as similar.

### ADDITIONAL CODES

T400V, T401, T401E, T401N, T401S, T401V, T402, T402E, T402N, T402V, T403V, T404, T405, T40AM, T40BM, T40E, T40E7, T40EC, T40ED, T40EH, T40EM, T40FE, T40FK, T40FT, T40H, T40H1, T40HD, T40HH, T40HL, T40HM, T40HT, T40J1, T40J3, T40J5, T40J8, T40J9, T40JC, T40JF, T40KF, T40KM, T40LA, T40N, T40N7, T40NA, T40NE, T40NG, T40NK, T40NP, T40PH, T40PM, T40S, T40SD, T40SF, T40SH, T40SL, T40SM, T40SX, T40T, T40V, T40V6, T40V7, T40V8, T40V9, T40VT, T40VZ, T40X3

### MATERIAL REFERENCE

X9840



## PROPERTIES SPECIFICATION

Test Criteria*	Test Conditions	Unit	Test Specification	Requirements
Density	+23°C	g/cm <sup>3</sup>	ASTM D 792	2.07 +/-0.03
Ball Indention Hardness	+23°C	MPa	ISO 2039-1	min. 27
Hardness	+23°C	Shore D	ASTM D 2240	N/A
Tensile Stress @ Break	+23°C	MPa	ASTM D 4894	min. 21.0
Elongation @ Break	+23°C	%	ASTM D 4894	min. 225

## TYPICAL ENGINEERING PROPERTIES

Test Criteria*	Test Conditions	Unit	Test Specification	Typical Value**
Density	+23°C	g/cm <sup>3</sup>	ASTM D 792	2.06
Ball Indention Hardness	+23°C	MPa	ISO 2039-1	37
Hardness	+23°C	Shore D	ASTM D 2240	61

Mechanical Properties				
Tensile Stress @ Break	+23°C	MPa	ASTM D 4894	26.0
Modulus 100%	+23°C	N/A	ASTM D 4894	N/A
Elongation @ Break	+23°C	%	ASTM D 4894	280
Deformation under Load	+23°C 23° C - 24h - 13.8 MPa	%	ASTM D 621	5.90
Creep	+23°C 23° C - 24h - 13.8 MPa - 1.5h	%	ASTM D 621	3.90

Miscellaneous Properties				
Surface Resistivity	+23°C 23° C	Ohm	DIN 53 482	5E+12
Volume Resistivity	+23°C 23° C	Ohm x cm	DIN 53 482	2E+13

\* All tests were carried out on standard samples. Values can vary on final product.

\*\* Typical values are given only as indication and actual results may vary depending on material batch.

Time within ( ) means the test has been performed after that duration. For e.g. (25H) means test was performed after 25H.

N/A: Value is not available.