



TIIVISTÄVÄ TEKIJÄ

# Toptex

Toptex is a high load composite bearing material constructed from a synthetic fabric reinforced thermoset resin and incorporating lubricating additives. The material features excellent mechanical strength and low friction.

## Mechanical Properties

### Compressive strength

Flatwise (normal to laminate)

375

MPa

Edgewise (parallel to laminate)

150

MPa

### Compressive modulus

2,750

MPa

### Impact Strength

100

$\text{kJ m}^{-2}$

### Density

1.30

$\text{g cm}^{-3}$

### Hardness

100

Rockwell M

### Water swell (at 20 °C)

< 0.15

%

### Coefficient of friction

(dry sliding against stainless steel, 15 MPa)

0.18 – 0.21

## Thermal Properties

### Operating temperature

Minimum

-40

°C

Continuous

70

°C

Maximum

130

°C

### Linear expansion coefficients

Flatwise (normal to laminate)

10

$10^{-5} / ^\circ\text{C}$

Edgewise (parallel to laminate)

5

$10^{-5} / ^\circ\text{C}$

The above values are nominal and intended to be used as a guide only.  
Material testing is carried out in accordance with the relevant standard.



Top-Osa Oy  
Tel. +358(0)33833700  
www.top-osa.fi

Vihiojantie 30  
33800 Tampere  
Finland