



Technical Data Sheet

25% GLASS FIBRE FILLED PTFE (WCM405)

DESCRIPTION: Polytetrafluoroethylene

PHYSICAL PROPERTIES

SPECIFIC GRAVITY: 2.2 - 2.26 g/cm³

COEFFICIENT OF LINEAR

THERMAL EXPANSION 25-100 °C: 7.5 - 11 (10⁻⁵ (mm/mm)/°C)

HARDNESS SHORE D ≥ 70

TENSILE STRENGTH: $\geq 17 \text{ N/mm}^2$

ELONGATION AT BREAK: ≥ 230 %

COMPRESSIVE STRENGTH

AT 1% DEFORMATION: 8 - 9 N/mm²

DEFORMATION UNDER LOAD: ≤ 10 %

(24 h 13.7 N/mm2 23 °C):

PERMANENT DEFORMATION: ≤ 6.5 %

(AS ABOVE, AFTER 24-H RELAXATION)

KINETIC COEFFICIENT OF FRICTION: 0.13

WEAR FACTOR @ PV100: 10 - 15 <u>cm³ • min • 10⁻⁸</u>

Kg • m • h

The base characteristics of PTFE are the ones offering a unique combination of:

- Low coefficient of friction
- Excellent chemical inertness
- Non-adhesive surface
- Wide temperature range withstanding (–200° C to +260° C)
- Excellent dielectric properties

Flexibility strength, plastic memory and hardness, are additional characteristics of PTFE products.

PTFE is practically inert to all chemical products, except for some alkaline metals, for example, clorotrifluoruro and for basic fluorine at high temperatures and pressures.

PTFE is considered one of the most stable materials from the thermal point of view.

Up to a service temperature of 260° C PTFE does not change its own physical and molecular properties.

With this grade being 25% Glass Fibre filled it exhibits enhanced wear resistance and enhanced chemical resistance (except for alkali and hydrofluoric acid).

We also offer Carbon, Bronze and Graphite filled PTFE.



Care should be taken in selecting the most suitable quality for each application. Advice is available, but final responsibility remains with the customer.

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