



**25% GLASS  
FILLED PTFE (TFG)**

## Design Description

PTFE 25% Glass contains 25% clean milled fibres and 75% PTFE virgin and is available in white with a hardness of 60 shore D.

This material offers a higher stiffness and better wear properties than PTFE virgin. It is not useable for soft metal counterparts and has a limited usage in hot water.

## Features

- Improved creep resistance over all temperature ranges
- Improved wear behavior
- Exceptional resistance to water
- 25% glass must be avoided with the use of strong alkalis and hydraulic acid
- Ideal for high load bearing applications

| Properties                      | Specified                    | Unit                | Test method  |
|---------------------------------|------------------------------|---------------------|--------------|
| Specific gravity                | 2.19-2.25                    |                     | ASTMD792     |
| Yield strength                  | 8-15                         | MPa                 | ASTMD1708    |
| Tensile strength                | 16-23                        | MPa                 | ASTMD1708    |
| Elongation                      | 200-310                      | %                   | ASTMD1708    |
| Hardness                        | 59-65                        | Shore D             | ASTMD2240    |
| Tensile modulus                 | 470                          | MPa                 | ASTMD638     |
| Flexural modulus                | 785                          | MPa                 | ASTMD790     |
| Deformation @ 14.2 MPa. 1HR     | 8-9                          | %                   | ASTMD621     |
| Deformation @ 14.2 MPa. 24 HRS  | 10-11                        | %                   | ASTMD621     |
| Permanent deformation           | 8-9                          | %                   | ASTMD621     |
| Deformation @ 6.9 MPa. 1HR      | 1-2                          | %                   | ASTMD621     |
| Deformation @ 6.9MPa. 24 HRS    | 2-3                          | %                   | ASTMD621     |
| Permanent deformation           | 1-2                          | %                   | ASTMD621     |
| Izod impact strength            | 110                          | J/m                 | ASTMD256     |
| Static coefficient of friction  | 0.16                         |                     | ASTMD1894    |
| Dynamic coefficient of friction | 0.08                         |                     | ASTM D1894   |
| Wear factor                     | 0.4 x 1.2 x 10 <sup>-4</sup> | mm <sup>3</sup> /Nm | Pin on Disc  |
| Melting point                   | 327                          | °C                  | ASTMD3418    |
| Continuous service in air (max) | 260                          | °C                  | Without load |
| Continuous service in air (min) | -260                         | °C                  | Without load |