

Issue 6

DATA SHEET

MATERIAL REFERENCE – FLUORINOID® FL 200

<u>DESCRIPTION</u> MODIFIED PTFE

FORMULATION PTFE MODIFIED WITH A SMALL AMOUNT OF PERFLUOROPROPYL-VINYL ETHER CO-MONOMER

TYPICAL APPLICATIONS

Modified PTFE offers the following advantages over PTFE:

- Lower deformation under load
- Better fatigue performance
- Better weldability
- Greater transparency
- Higher elongation
- Higher dielectric strength

On request this material can be produced from polymer which satisfies the compositional requirements of US FDA Regulation 21 CFR 177.1550.

Typical applications are diaphragms and bellows due to its increased fatigue resistance and lower permeability compared to virgin PTFE. Other applications are gaskets and electrical insulators due to lower creep and high dielectric strength respectively.

TYPICAL PHYSICAL PROPERTIES

| SPECIFIC GRAVITY | (BS | EN ISO 13000-2) | 2.16 |
|--------------------------|---------|-----------------|----------------------|
| TENSILE STRENGTH | | | |
| (Ram Extruded) | (BS | EN ISO 13000-2) | 30 MPa |
| TENSILE STRENGTH | | | |
| (Compression Moulded) | (BS | EN ISO 13000-2) | 25 MPa |
| ELONGATION | (BS | EN ISO 13000-2) | 350 % |
| SHORE D HARDNESS | (BS | EN ISO 13000-2) | 56 |
| DIELECTRIC STRENGTH, 0.2 | mm film | (ASTM D149) | 70 kV/mm |
| DIELECTRIC CONSTANT @ 1 | lMHz | (ASTM D150) | 2.1 |
| DISSIPATION FACTOR @ 1M | Hz | (ASTM D150) | 0.7×10^{-4} |
| OPERATING TEMPERATURE | RANGE | | -260 to 260°C |

These figures are typical values for the material and do not represent a product specification. Properties will vary depending on the source of raw material, method of processing, physical form of the product, direction of measurement etc.

Fluorinoid® is a registered trademark of Fluorocarbon Group

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