

## MATERIAL DATASHEET

# DMH 610 PTFE I

Mechanical, Physical and Thermal Properties

15 % clean milled glass fibres + 5% MoS2 + 80 % virgin PTFE

| PROPERTIES                       | CONDITION      | STANDARD           | UNIT                               |       | UNIT                               |           |
|----------------------------------|----------------|--------------------|------------------------------------|-------|------------------------------------|-----------|
| Colour                           |                |                    |                                    | grey  |                                    | grey      |
| density/specific gravity         | 23 °C          | DIN 53479          | kg/m <sup>3</sup>                  | 2260  | g/cm <sup>3</sup>                  | 2,26      |
| hardness                         | 23 °C/3 sek.   | ISO 868            | Shore D                            | 58 ±3 | Shore D                            | 58 ±3     |
| hardness                         | 23°C/15 sek.   | ISO 868            | Shore D                            | 58 ±3 | Shore D                            | 58 ±3     |
| ball indentation hardness        | 23 °C          | DIN 53456 H 135/30 | MPa                                | 27 ±5 | psi                                | 3915 ±725 |
| tensile strength                 | 23 °C          | ASTM D 4745-11a    | MPa                                | ≥ 16  | psi                                | ≥ 2320    |
| elongation at break              | 23 °C          | ASTM D 4745-11a    | %                                  | ≥ 185 | %                                  | ≥ 185     |
| compressive strength             | 23 °C          | DIN 53455          | MPa                                | ≥ 8   | psi                                | ≥ 1160    |
| thermal conductivity             |                | DIN 52612          | $\frac{J * 10^3}{m * h * K}$       | 1,1   | $\frac{J * 10^3}{m * h * K}$       | 1,1       |
| coefficient of thermal expansion | 25 °C - 200 °C |                    | K <sup>-1</sup> * 10 <sup>-5</sup> | 13    | K <sup>-1</sup> * 10 <sup>-5</sup> | 13        |
| coefficient of friction *        | 23 °C          |                    | μ                                  | 0,13  | μ                                  | 0,13      |
| minimum service temperature      |                |                    | °C                                 | -200  | °F                                 | -328      |
| maximum service temperature      |                |                    | °C                                 | 260   | °F                                 | 500       |
| young's modulus                  |                | DIN 53457          | MPa                                | 1320  | psi                                | 191500    |

\* coefficient of friction dry dynamic Steel 16MnCr5 v=0,6m/s; p=0,05 MPa; t=5h

## Chemical Properties

Resistant to almost all chemicals

Not resistant to halogenides, elemental fluorine, CF3, molten alkali metals

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Detailed information concerning chemical resistance see DMH Chemical Resistance Guide

# DMH

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