# Technical Data Sheet

## Polystone® M Oil Filled - ASTM (PE-UHMW / PE 1000)

### Product characteristics

- High abrasion and wear resistance
- Low coefficient of friction & self-lubricating
- High impact strength

### Product applications

- Conveyor guides & wear strips
- Chain tracks
- Guides & tensioners

| | Test method | Unit | Guideline Value |
|---|---|---|---|
| **General properties** | | | |
| Density | ASTM D792 | g / cm$^3$ | 0.94 |
| Water Absorption | ASTM D570 | % | <0.01 |
| **Mechanical properties** | | | |
| Wear resistance | Sand-slurry | | 100 |
| Hardness | ASTM D2240 | Shore D | 62 - 66 |
| Tensile Strength at yield 73°F | ASTM D638 | psi | 3000 |
| Tensile Modulus | ASTM D638 | psi | 100000 |
| Elongation at Break | ASTM D638 | % | >260 |
| Flexural Strength | ASTM D790 | psi | 3200 |
| Compressive Strength | ASTM D695 | psi | 2900 |
| Coefficient of Friction, Dynamic | | | 0.10-0.12 |
| Coefficient of Friction, Static | | | 0.15-0.17 |
| **Thermal properties** | | | |
| CTE, linear | ASTM D696 | in/in/°F | $1.1 \times 10^{-4}$ |
| Melting Point | | °F | 266 - 275 |
| Maximum Service Temperature, Air | | °F | 180 |
| Heat Deflection Temperature 264psi | ASTM D648 | °F | 108 |
| Flammability, UL94 | | 1/8 inch | HB |
| **Electrical properties** | | | |
| Dielectric constant | ASTM D150 | 1 MHz | 2.3 |
| Surface resistivity | internal | Ω/sq | $>10^{12}$ |
| **Compliance Properties** | | | |
| FDA | | | Yes |
| NSF | | | No |
| USDA | | | Yes |

The data stated above are average values ascertained by statistical tests on a regular basis. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale.

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