

## Technical Data Sheet

# Polystone<sup>®</sup> M Slide - ASTM

PE-UHMW / PE 1000

### Typical characteristics

- Low coefficient of friction
- Self-lubricating
- Good wear properties

### Typical industries

- Conveyor Technology & Automation
- Food Industry
- Mechanical Engineering Industry

|                                  | Test method | Unit                | Guideline value        |
|----------------------------------|-------------|---------------------|------------------------|
| <b>General properties</b>        |             |                     |                        |
| Density                          | ASTM D792   | g / cm <sup>3</sup> | 0.95 - 0.96            |
| Water Absorption                 | ASTM D570   | %                   | 0.01                   |
| <b>Mechanical properties</b>     |             |                     |                        |
| Wear resistance                  | Sand-slurry |                     | 80                     |
| 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   | %                   | >200                   |
| Flexural Strength                | ASTM D790   | psi                 | 2300                   |
| Compressive Strength             | ASTM D695   | psi                 | 2900                   |
| Coefficient of Friction, Dynamic |             |                     | 0.07-0.10              |
| Coefficient of Friction, Static  |             |                     | 0.10-0.15              |
| <b>Thermal properties</b>        |             |                     |                        |
| CTE, linear                      | ASTM D696   | 1/K                 | 1.0 x 10 <sup>-4</sup> |
| Melting Point                    |             | °F                  | 266 - 275              |
| Maximum Service Temperature, Air |             | °F                  | 180                    |
| Flammability, UL94               |             | 1/8 inch            | HB                     |
| <b>Electrical properties</b>     |             |                     |                        |
| Dielectric constant              | ASTM D150   | 1MHz                | 2.3                    |
| Surface resistivity              | ASTM D257   | Ω/cm                | >10 <sup>12</sup>      |

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|                              | Test method | Unit | Guideline value |
|------------------------------|-------------|------|-----------------|
| <b>Compliance properties</b> |             |      |                 |
| FDA                          |             |      | Yes             |
| NSF                          |             |      | No              |
| USDA                         |             |      | No              |

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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