

### Technical Data Sheet

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

#### Typical characteristics

- Low coefficient of friction
- Very good abrasion and wear resistance
- Good impact strength

#### Typical industries

- Doprava sypkého materiálu
- Dopravní technika a automatizace
- Potravinářský průmysl

|                                    | Test method | Unit                | Guideline value       |
|------------------------------------|-------------|---------------------|-----------------------|
| <b>General properties</b>          |             |                     |                       |
| Specific Gravity                   | ASTM D792   | g / cm <sup>3</sup> | 0.93                  |
| Water Absorption                   | ASTM D570   | %                   | <0.10                 |
| <b>Mechanical properties</b>       |             |                     |                       |
| Wear resistance                    | Sand-slurry |                     | 100                   |
| Hardness                           | ASTM D2240  | Shore D             | 62 - 66               |
| Tensile Strength at yield 73°F     | ASTM D638   | psi                 | 3100                  |
| Tensile Modulus                    | ASTM D638   | psi                 | 100000                |
| Elongation at Break                | ASTM D638   | %                   | >350                  |
| Flexural Strength                  | ASTM D790   | psi                 | 3500                  |
| Compressive Strength               | ASTM D695   | psi                 | 3000                  |
| Izod Impact, Notched               | ASTM D256   | ft-lb/in            | No Break              |
| Coefficient of Friction, Dynamic   |             |                     | 0.10-0.22             |
| Coefficient of Friction, Static    |             |                     | 0.15-0.20             |
| Izod Impact Strength               | ASTM D4020  | kJ / m <sup>2</sup> | 125                   |
| <b>Thermal properties</b>          |             |                     |                       |
| CTE, linear                        | ASTM D696   | in/in/°F            | 1.1x 10 <sup>-4</sup> |
| Melting Point                      | ASTM D3418  | °F                  | 266 - 275             |
| Vicat Softening Point              | ISO306      | °F                  | 176                   |
| Maximum Service Temperature, Air   |             | °F                  | 180                   |
| Heat Deflection Temperature 264psi | ASTM D648   | °F                  | 108                   |
| Flammability, UL94                 |             | 1/8 inch            | HB                    |

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|                              | Test method | Unit               | Guideline value |
|------------------------------|-------------|--------------------|-----------------|
| <b>Electrical properties</b> |             |                    |                 |
| Volume Resistivity           | ASTM D257   | $\Omega\text{cm}$  | $>10^{15}$      |
| Dielectric constant          | ASTM D150   | 1MHz               | 2.3             |
| Dielectric strength          | ASTM D149   | kV / mm            | 45              |
| Surface resistivity          | ASTM D257   | $\Omega/\text{cm}$ | $>10^{12}$      |
| <b>Compliance properties</b> |             |                    |                 |
| 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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