

Technical Data Sheet



Polystone® G Virgin Natural UV-Stabilized - ASTM (high-density polyethylene)

Product characteristics

- Excellent overall mechanical properties
- Easy to machine and weld
- High chemical resistance

Product applications

- Tanks & Vessels
- Food cutting boards
- Light-duty guides & rails

| | Test method | Unit | Guideline Value |
|---|-------------|----------------------------|-----------------|
| General properties | | | |
| Density | ASTM D792 | g / cm ³ | 0.955 |
| Water Absorption | ASTM D570 | % | <0.10 |
| Carbon Black Content | ISO6964 | % | n/a |
| Mechanical properties | | | |
| Tensile Strength at Yield | ASTM D638 | psi | 4000 |
| Hardness | ASTM D2240 | Shore D | 65 |
| Tensile Modulus | ASTM D638 | psi | 217000 |
| Tensile Elongation | ASTM D638 | % | >700 |
| Flexural Strength | ASTM D790 | psi | 210000 |
| Izod Impact, Notched | ASTM D256 | ft-lb/in | 3.5 |
| Coefficient of Friction, Dynamic | | | 0.20-0.29 |
| Thermal properties | | | |
| Coefficient of Linear Thermal Expansion | ASTM D696 | in/in/°F x10 ⁻⁵ | 6 |
| Melting Point | | °F | 268 |
| Deflection Temperature at 1.8Mpa (264psi) | ASTM D648 | °F | 165 |
| Brittleness Temperature | ASTM D746 | °F | -103 |
| Flammability, UL94 | | 1/8 inch | HB |
| Compliance Properties | | | |
| FDA | | | No |
| NSF | | | No |
| USDA | | | No |
| ASTM Approval | | | D-4976 |

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.

