



Raw Material High-Density Polyethylene (HDPE)

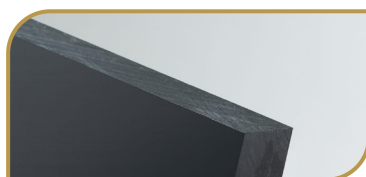
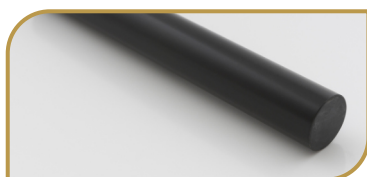
| General Properties | Test Method | Unit | Value |
|---|-------------------------|----------------------------------|------------------|
| Density | DIN EN ISO 1183 | g/cm ³ | 0.955 |
| Water Absorption in air 50% r.h. | DIN 53715 | % | 0 |
| Absorption 23-C In Water-Saturation | DIN 53495 | % | 0.02 |
| Food Compliance | - | FDA/BfR | YES |
| UV Stability | - | - | YES |
| Mechanical Properties | | | |
| Tensile Stress At Yield At Break | DIN 53455 | N/mm ² | 30 |
| Elongation At Break | DIN 53453 | % | 500 |
| Tensile Modulus Of Elasticity | DIN 53456 | N/mm ² | 800 |
| Compression Test 1% Strain 1000h | DIN 53444 | N/mm ² | 3 |
| Notched Impact Strength (Charpy) | DIN 53455 | KJ/mm ² | 12 |
| Ball Indentation Hardness | DIN 53453 | N/mm ² | 40 |
| Shore Hardness (D) | DIN 53456 | Scale D | 63 |
| Coefficient Of Friction To Steel | DIN 53375 | u | 0.32 |
| Thermal Properties | | | |
| Melting Temperature | ISO 3146 | °C | 130 |
| Thermal Conductivity | DIN 52612 | W/km | 0.39 |
| Deformation at temperature HDT | DIN 53461 | °C | 45 |
| Coefficient Of Linear Thermal Expansion | DIN 53752 | 10 ⁻⁶ K ⁻¹ | 180 |
| Service Temperature, Long Term | Average | °C | 80 |
| Service Temperature, Short Term (MAX) | Average | °C | 90 |
| Minimum Operating Temperature | Average | °C | -50 |
| Flammability | UL 94 (3-6mm thickness) | - | HB |
| Electrical Properties | | | |
| Dielectric Constant at 1 MHz | DIN 53483 | - | 2.3 |
| Dielectric Dissipation Factor (1 MHz) | DIN 53483 | - | 0.0006 |
| Volume Resistivity | DIN 53482 | cm | 10 ¹⁵ |
| Dielectric Strength | DIN 53481 | KV/mm | 45 |

Applications:

- Chemical Vessels
- Storage Tanks
- Conveyor Components & Rollers
- Cutting Boards
- Bulk Solid Bins & Hoppers

Characteristics:

- Extremely Light Weight & Tough
- Excellent Wear Resistance
- Good Chemical Resistance
- Low Co-efficient Of Friction



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