

HDPE Technical Datasheet

Key Features

- Abrasion Resistant
- High impact resistance
- Low coefficient of friction Scratch
- Marking resistant Chemical resistant
- Water and moisture resistant

Common Applications

- Food cutting boards
- Corrosion resistant covers
- Pipe flanges
- Radiation shielding
- Self-supporting containers
- Prosthetic devices

Material Description

HDPE, or High-Density Polyethylene, is a versatile thermoplastic known for its strength, durability, and chemical resistance. It is commonly used in a wide range of applications due to its excellent impact strength, low moisture absorption, and resistance to chemicals, making it suitable for use in both indoor and outdoor environments. HDPE is widely used in packaging, industrial equipment, and the construction industry due to its excellent resistance to corrosion and abrasion. Additionally, HDPE can be recycled and reused, making it an environmentally friendly choice for many applications.

Mechanical Properties

Ultimate tensile strength Tensile Yield Strength Hardness Elongation at Break 22.0 MPa 26.2 MPa Rockwell R48.7 587%

Physical Properties

Density Thermal Conductivity Modulus of Elasticity Melting Point 0.034 lb/in³ (0.954 g/cm³) 0.288 - 0.480W/m.K 0.995 GPa 131 °C

Technical Assistance

Our knowledgeable staff, supported by our in-house team of expert metallurgists and engineers, is ready to assist you with any technical inquiries.

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