

# HDPE (High-density polyethylene)

## Key Features

Flame retardancy • Flexibility • Impact resistance • Chemical resistance

## Applications

End-use parts • Automotive • Packaging • Consumer goods

## Product Description

High-density polyethylene (HDPE) resin is known for its high chemical resistance, excellent flexibility, and good impact strength. Ideal for injection molding, this material is widely used in packaging for chemical containers and bottles, agricultural irrigation pipes, construction pipelines and insulation, consumer goods like bins and flexible tubes, and automotive fuel tanks and protective linings.

## Properties\*

|                                 |                             |
|---------------------------------|-----------------------------|
| Tensile strength                | 24 MPa                      |
| Elongation at break             | 50%                         |
| Flexural strength               | 20 MPa                      |
| Flexural modulus                | 1,100 MPa                   |
| Impact Strength, IZOD notched   | 3.5 kJ/m <sup>2</sup>       |
| Density                         | 1.04±0.02 g/cm <sup>3</sup> |
| Flame retardancy (1.5 - 3.0 mm) | UL 94-V2                    |

\*Based on material Kingfa PE-RH200

## Reference

For more detailed source information, please consult the original document linked [here](#). We encourage users to verify the data's relevance and suitability for their specific needs.

