

HDPE**HDPE YGH041****HIGH DENSITY POLYETHYLENE (HDPE) PE100 PIPE GRADE**

This high-density polyethylene grade has a broad or bimodal molecular-weight distribution that provides a favourable balance of rigidity and toughness together with strong creep resistance and low sag during processing. Classified as PE100, it is supplied in the natural (uncompounded) form for extrusion of pressurized water and gas pipe and other industrial piping applications.

Typical Application

- Pressurized water and gas pipelines
- Industrial pressure piping
- PE100 pipe extrusion (natural/uncompounded)

Product Characteristics

- Broad or bimodal molecular-weight distribution
- Strong creep resistance
- Balanced rigidity and toughness
- PE100 classification (MRS 10.0 MPa)
- Low sag during processing

Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow (190°C/2.16kg)	ASTM D1238	1	g/10 min
Density		0.950	g/cm ³
Tensile Stress at Yield		19	MPa
Tensile Modulus		860	MPa
Elongation at Break (23°C, 50 mm/min)		580	%

1. The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.
2. Typical values per the producer's published family data; grade-specific certificate of analysis supplied per lot at order.
3. Melt flow rate is reported here at 1 g/10 min per the producer's current commercial documentation; an earlier published producer catalogue lists 0.25 g/10 min for the same grade code, possibly reflecting a differing test condition or a subsequent grade revision. Density and the mechanical properties shown are consistent between both sources.