

## DESCRIPTION

Alkadyne HDF145B is a black high molecular weight bimodal PE100 High Density Polyethylene. It is a high performance resin for use in pressure pipes where service life to 100 years is required. Alkadyne HDF145B offers a balance of excellent processing characteristics along with outstanding toughness, chemical resistance and slow crack growth resistance. Alkadyne HDF145B will also provide excellent resistance to the effects of ultra-violet light exposure in outdoor applications due to well dispersed carbon black.

## APPLICATION

Alkadyne HDF145B is suitable for extrusion into a full range of pipes, where High Density, PE100 type resins are required. In particular, a broad processing window and excellent sag resistance enables the extrusion of larger bore, very thick wall pipe. Alkadyne HDF145B is suitable for use in the transport of a wide range of fluids for industrial, rural and mining applications, including potable water. Suitability for use in any application should be determined by appropriate performance testing.

## COMPLIANCE

Alkadyne HDF145B complies to AS/NZS 4131 2010 for PE100 type compounds. It is intended to be used in pipes conforming to AS/NZS 4130.

## PRODUCT SAFETY

For product safety information please refer to the Safety Data Sheet at [qenos.com](http://qenos.com).

Polymer Properties	Value <sup>1</sup>	Units	Test Method
Melt Index @ 190°C, 5.0 kg	0.17	g/10 min	ASTM D1238
Melt Index @ 190°C, 21.6 kg	6.6	g/10 min	ASTM D1238
Density	0.961	g/cm <sup>3</sup>	ASTM D1505/D2839

Pipe Properties	Value <sup>1</sup>	Units	Test Method
Tensile Strength at Break <sup>2</sup>	37	MPa	ASTM D638
Tensile Strength at Yield <sup>2</sup>	25	MPa	ASTM D638
Elongation at Break <sup>2</sup>	760	%	ASTM D638
Elastic Modulus <sup>2</sup>	1300	MPa	ASTM D638
Flexural Modulus <sup>3</sup> (1% secant)	1120	MPa	ASTM D790
Durometer Hardness	63	Shore D	ASTM D2240

1. Typical values - not to be construed as specifications.
  2. At 50mm/min cross head speed, type 4 dumbbell and 1.9 mm thickness
  3. At 12.7 mm/min cross head speed
- For up to date information, refer to [qenos.com](http://qenos.com)



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