

Producer: Qenos Pty Ltd / Australia

HDPE HDF145B

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.

Safety

Material Safety Data Sheets are available from Qenos for all Qenos polyethylene grades

PROPERTY	TEST	UNIT	VALUE
<i>Base Polymer Properties</i>			
Melt Index @190°C, 5.0kg	ASTM D1238	g/10min	0.17
Melt Index @190°C, 21.6kg	ASTM D1238	g/10min	6.6
Density	ASTM 1505/D2839	g/cm ³	0.961
Tensile Strength at Break ²	ASTM D638	MPa	37
Tensile Strength at Yield ²	ASTM D638	MPa	25
Elongation at Break ²	ASTM D638	%	760
Elastic modulus ²	ASTM D638	MPa	1300
Flexural modulus ³ (1% secant)	ASTM D790	MPa	1120
Durometer hardness	ASTM D2240	Shore D	63



1. Typical values - not to be construed as specifications.
2. At 50 mm/min cross head speed, type 4 dumbbell and 1.9 mm thickness
3. At 12.7 mm/min cross head speed

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