

Centrene®

Polyethylene

Qenos

Grade	Major End Use
HDF193B	PIPE EXTRUSION

Description
Centrene® HDF193B is a black high molecular weight bimodal PE 100 High Density Polyethylene. It is a high performance resin for use in pressure pipes where service life to 100 years is required. HDF193B offers a balance of excellent processing characteristics along with outstanding toughness, chemical resistance and slow crack growth resistance. HDF193B will also provide excellent resistance to the effects of ultra-violet light exposure in outdoor applications due to well dispersed carbon black.

Application
Centrene® HDF193B is suitable for extrusion into a full range of pipes, where High Density, PE 100 type resins are required. In particular, a broad processing window and good sag resistance enables the extrusion of larger bore, thick wall pipe. HDF193B 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.

Specifications
HDF193B 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 for all Qenos polyethylene grades from Qenos.



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Qenos Pty Ltd ACN 054 196 771

Grade
HDF193B

Physical Properties			
Property	Test Method	Value ¹	Units
<i>Base Polymer Properties</i>			
Melt Index @190°C, 5.0kg	ASTM D1238	0.3	g/10min
Melt Index @190°C, 21.6kg	ASTM D1238	8.9	g/10min
Density	Qenos method	0.956	g/cm ³
Tensile Strength at Break ²	ASTM D638	33	MPa
Tensile Strength at Yield ²	ASTM D638	26	MPa
Elongation at Break ²	ASTM D638	760	%
Elastic Modulus ²	ASTM D638	1300	MPa
Flexural Modulus ³ (1% secant)	ASTM D790	1150	MPa
Durometer Hardness	ASTM D2240	63	Shore D

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 www.qenos.com

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