

PE100

MATERIAL TECHNICAL DATA SHEET

Description

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 HDF193B offers a balance of excellent processing characteristics along with outstanding toughness, chemical resistance and slow crack growth resistance. Alkadyne HDF193B will also provide excellent resistance to the effects of ultra-violet light exposure in outdoor applications due to well dispersed carbon black.

Application

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. Alkadyne 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.

Compliance

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.

Physical Properties (Typical)

Property	Test Method	Value	Units
Melt Index	ASTM D1238 @190°C, 5kg	0.3	g/10min
Melt Index	ASTM D1238 @190°C, 21.6kg	8.9	g/10min
Density	ASTM D792	0.961	g/cm ³
Break Tensile Strength	ASTM D638	33	MPa
Yield Tensile Strength	ASTM D638	26	MPa
Elastic Modulus	ASTM D638	760	%
Flexural Modulus	ASTM D790	1150	MPa
Durometer Hardness	ASTM D2240	63	Shore D

Typical properties not to be construed as specifications. Batch Certificates are available upon request.