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Technical Data Sheet

Taisox 8001BL-Black

1.Product description

8001BL are an ethylene/butene copolymer. The trade name is TAISOX. This product manufactured by the CSTR slurry process. The copolymer designed for the extrusion of various pressure pipes.

According to ISO 12162:1995(E) is the black PE pipe grade TAISOX 8001BL classified PE 100 at 20℃ and 50 years exceeds a MRS of 10Mpa. It provides good creep resistance, excellent ESCR, and high mechanical properties.

8001BL is recommended in the applications of potable water pipe, gas pipe, sewer & drain pipe, telecommunication system, industrial pipe, circular cages etc .

2.Typical properties

Properties	Units	Test Method	Typical Value
Melt Index $MI_{2.16}$	g/10min	ASTM D1238	0.05
Melt Index MI_5	g/10min	ASTM D1238	0.23
Melt Index $MI_{21.6}$	g/10min	ASTM D1238	7.0
Density	g/cm^3	ASTM D1505	0.958
Thermal properties			
Melting point	℃	DSC	129
Softening point	℃	ASTM D1525	124
Brittleness point	℃	ASTM D746	<-70
Mechanical properties			
Tensile strength at yield	Kg/cm^2	ASTM D638	240
Tensile strength at break	Kg/cm^2	ASTM D638	360
Elongation at break	%	ASTM D638	850
Hardness	Shore D	ASTM D2240	64
MRS	Mpa	ISO 9080	10
Carbon Black Content	%	ISO6964	2.3
Thermal stability(200℃)	min	ISO/TR 10837	>30

*Data shown are average values and should not be examined for specifications

3.Processing guidelines

Pre-drying

For normal extrusion equipments, we suggest preheating and drying 80- 90℃ for1-2 hours before use.

Extrusion

The actual extrusion conditions will depend on the type of equipment used, also depend on size and wall thickness of the pipe produced. TAISOX8001BL can be extruded at temperature profiles between 185 and 215°C with a melt temperature between 200 and 220°C.

The following conditions may be used as a guideline:

Cylinder	185-210℃
Die	200-215℃
Melt	200-220℃