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Formosa Plastics Corporation

Technical Data Sheet

Taisox 8001-Natural

1. Product description

8001 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 PE pipe grade TAISOX 8001 natural classified PE 100 at 20 and 50 years exceeds a MRS of 10Mpa. It provides good creep resistance, excellent ESCR, and high mechanical properties.

8001 is recommended in the applications of potable water 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	0.948
Thermal properties			
Melting point		DSC	129
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
Izod Impact Strength	Kg-cm/cm notch	ASTM D256	>25
Hardness	Shore D	ASTM D2240	64
MRS	Mpa	ISO 9080	10
Thermal stability(200)	min	ISO/TR 10837	>30

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

3. Processability

TAISOX8001 HDPE Resin can be extruded at temperature profiles between 185 and 215°C with a melt temperature between 200 and 220°C.

extruder temperature set for reference :

Cylinder 185-210

Die 200-215

Melt 200-220