

Resin Type High Density Polyethylene · Pipe extrusion grade

Applications Pressure pipes for water and drainage(Base resin)

Description

- Characteristics : Excellent weather resistance & ESCR
- Additives : Anti-Oxidants, Lubricants
- Processing recommendations : Maintain the stock temperature 200 ~ 230℃ (392 ~ 446°F) for optimum part quality
- Specification Data
 - 1) Cell Class(ASTM D 1248) : Type III, Class A, Category 5, Grade P34
 - 2) Cell Class(ASTM D 3350) : 34544(ESCR:>600hr)4 A or 34546(PENT:>100hr)4 A
Cell Class(ISO 13479) : 376hr (80℃, 8.0bar)
 - 3) PPI Recommended Designation : PE3408
 - 4) ISO Classification : Grade PE80

Properties	Test Method	Test Condition	Unit	Value
Physical				
Melt Flow Rate	ASTM D1238	190°C/2.16 kg	g/10 min	0.13
Density	ASTM D1505	23°C	g/cm ³	0.943
Thermal				
Melting Temperature	ASTM D3418	10°C/min	°C	128
Vicat Softening Point	ASTM D1525	–	°C	123
Mechanical				
Tensile Strength at Yield	ASTM D638	50 mm/min.	kg/cm ²	220
			MPa	22
			psi	3,129
Tensile Strength at Break			kg/cm ²	350
			MPa	34
			psi	4,978
Elongation at Break			%	> 800
Flexural Modulus	ASTM D790	–	kg/cm ²	9,000
			MPa	883
			psi	128,010
Izod Impact Strength	ASTM D256	23°C (Notched)	kg·cm/cm	25
Hardness (Rockwell)	ASTM D785	R-scale	-	73
ESCR	ASTM D1693	F50	hr	> 1,500

* Typical resin property values measured on a standard compression molded specimens, conditioned at 23℃.

Pipe

HYDROSTATIC DESIGN BASIS(HDB)				
23℃ (73°F)	ASTM D2837	–	psi (MPa)	1,600 (11.0)
60℃ (140°F)		–		800 (5.5)

The data and information represented herein are intended as a general guide only and are not construed as specification limits. Since the actual processing conditions of our products may vary and are beyond our control, establishing satisfactory performance of the resin for the intended application is the customer's sole responsibility.