

Polyethylene · PE-RT Grade

Application

Hot & cold drinking water pipe, Floor heating, Radiator connection, Al composite pipe



Description

Certified to NSF/ANSI Std. 61

SP 980, LG PERT is a high performance PE for hot and cold water pipe. It was developed by using a new LG catalyst technology as well as new concept which lead to a BOCD(Broad Orthogonal Co-monomer Distribution) molecular structure. Pipes made out of SP 980 offer excellent properties to both processability and Long Term Hydrostatic Strength. SP980 conforms to the FDA regulation 21 CFR 177.1520. and the NSF/ANSI standard 61(drinking water system components-Health effects).

Specification

Properties	Test Method	Condition	Unit	Value
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Physical

Melt Index	ASTM D1238	190°C/2.16kg	g/10min	0.6
Density	ASTM D1505	23°C	g/cm ³	0.938
Softning Point(Vicat)	ASTM D1525	-	°C	124

Mechanical

Tensile Strength at Yield	ASTM D638	50mm/min	kg/cm ²	190
Tensile Strength at Break	ASTM D638	50mm/min	kg/cm ²	350
Elongation at Break	ASTM D638	50mm/min	%	700
Izod Impact Strength	ASTM D256	1/4", 23°C	kg·cm/cm	N.B
Flexural Modulus	ASTM D790	2.8mm/min	kg/cm ²	5,600
Hardness(Shore D)	ASTM D2240	Shore D	-	56
E.S.C.R(F50)	ASTM D1693	50°C	hr	> 10,000

* NOTE : Above given value should only be used as a guide and should not be considered as a guarantee.

Pressure Test

Item	Test Method	Condition	Test Time	Result
Internal Pressure Test	KS M3416	20°C, 10MPa	1h	Pass
Internal Pressure Test	KS M3416	95°C, 3.6MPa	165h	Pass
Internal Pressure Test	KS M3416	95°C, 3.5MPa	1,000h	Pass
Thermal Stability by Hydrostatic Pressure Test	KS M3416	110°C, 1.9MPa	8,760h	Pass

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