

LUCENE™ SP980

Metallocene Polyethylene

Applications

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

Description

- LUCENE™ SP980, LG PE-RT(Type I) is a high performance MDPE for hot and cold water pipe. It is developed by using a new LG catalyst technology.
- It has excellent stress crack resistance properties and Long Term Hydrostatic strength.
- LUCENE™ SP980 Polyethylene Resin meets requirements of the FDA regulation 177.1520 and NSF/ANSI Standard 61 (Drinking Water System Components - Health Effect).

Typical properties

Characteristics	Test Method	Unit	Value
Physical⁽¹⁾			
MFR(190℃,2.16Kg)	ASTM D1238	g/10min	0.6
Density	D1505	g/cm ³	0.938
Mechanical⁽²⁾			
Tensile Strength at Yield	D638	Mpa	20
Tensile Strength at Break	D638	Mpa	34
Elongation at Break	D638	%	720
Hardness (Shore D)	D2240	-	57
Flexural Modulus	D790	Mpa	600
Izod Impact Strength	D256	J/m	Non Break
ESCR(F50)	D1693	hr	> 8,760
Thermal			
Melting Temperature	LG Method	℃	126
Vicat Softening Point	D1525	℃	124

(1) The properties data in this table are typical values, and not guaranteed specification.

(2) Typical resin property values are measured on a standard compression molded specimens

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Processing information

- Equipment : Single Screw Extruder(Conventional PE Screw)
- Temperature :

Hopper zone	Cylinder (Barrel)	Head / Die zone
cooled	180 ~ 230 °C	200 ~ 220 °C

- Die to Calibration : 2 ~ 10cm
- Recommendation : Screw C/R ; 2.2 ~ 2.5
Screw L/D ; 24 ~ 30
Die Gap ; Wall Thickness X 1.7 ~ 2.5
- The actual extrusion conditions depend on the screw, die design, pipe diameter, wall thickness and throughput rate.