

Introduction of HDPE for Fiber Application

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Introduction of Bi-component Fiber

Bi-component fiber provides excellent level of softness essential for all kinds of hygiene product application.

□ Application: Hygiene, Medicals, General consumer goods

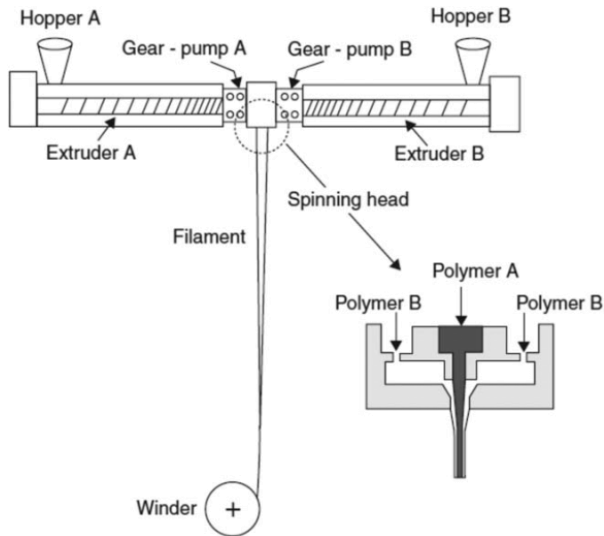
Diaper & Hygiene Products



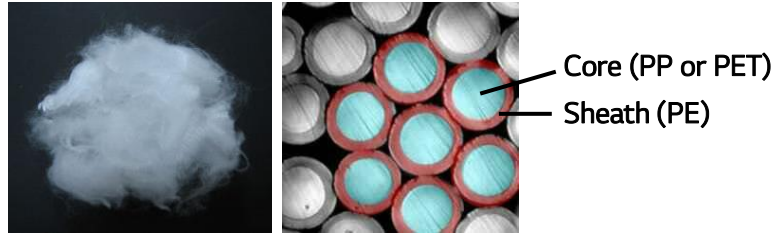
Industrial & Nonwoven Fabric



Bicomponent Fiber Fabrication Process



Bicomponent Fiber Structure



Bicomponent Fiber Characteristics

Part	Sheath	Core
Component ratio	50%	50%
Material	PE	PP or PET
Function	<ol style="list-style-type: none"> 1) Softness 2) Good adhesion property 3) Higher elongation 4) Abrasion resistance 	<ol style="list-style-type: none"> 1) Spinning stability 2) Drawdown capability 3) Good tensile strength

LG Chem HDPE Series for Bi-component Fiber

LG Chem produces 3 types of HDPE fiber grades with novel catalyst technology.

| Ziegler Natta HDPE Grade |

For General Purpose

Series	Application	MI (g/10min)	Density (g/cm ³)	Tensile Strength at Yield point	Melting Temperature	Characteristic
ME9180F	Staple fiber	20	0.958	290	132	Good softness

| Metallocene HDPE Grade |

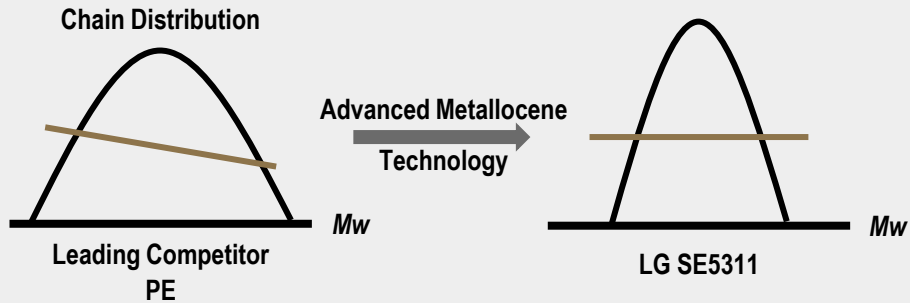
For High End Application

Series	Application	MI (g/10min)	Density (g/cm ³)	Tensile Strength at Yield point	Melting Temperature	Characteristic
SE5311	Staple fiber	20	0.953	290	130	Excellent softness & drapability
SE5412	Spun bond	30	0.954	290	131	Excellent softness & drapability

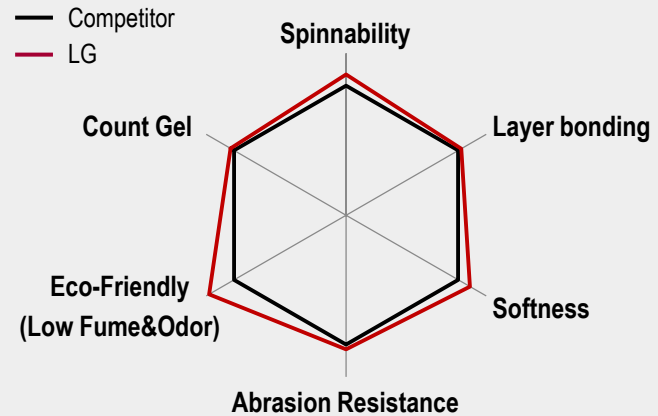
Technology Breakthrough: Molecular Structure Design

LG Chem provides customer satisfaction with superior processability and mechanical properties.

Molecular Structure Comparison



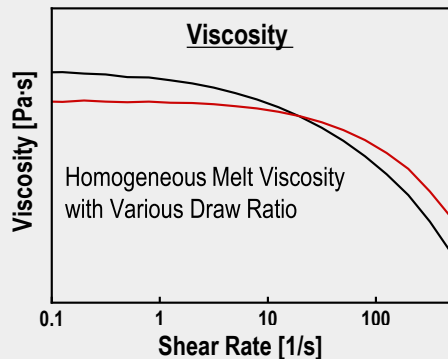
Product Features



Major Characteristics

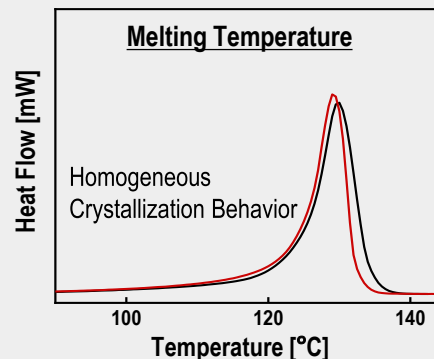
1. Narrow Molecular Weight Distribution & Flat CD

- Homogeneous Crystal Structure & Melt Behavior
- Excellent Tenacity & Spinnability



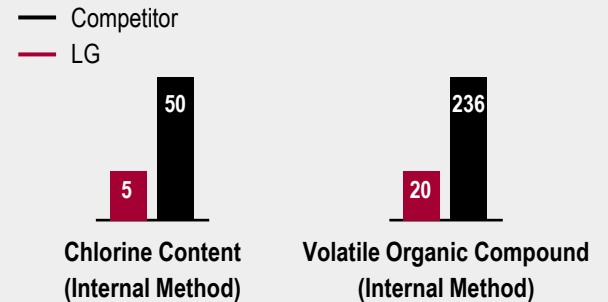
2. Low Molecular Weight Fraction Reduction

- Eco-friendly: Low Fume & Odor
- Health Care & Hygiene Excellence



3. Novel High Purity & Halogen-free Polyethylene

- Fabrication Process Management combined with New Metallocene Technology
- Excellent Color Stability



Nonwovens and Fibers Total Solution

LG Chem Fiber Grade Resins for Nonwovens and Fibers Applications

◎ Strongly Recommend ○ Recommend

Product	Grade	MI (g/10min)	Density (g/cm ³)	Category by Process				Applications			
				Bi-co S/F	Bi-co S/B	Mono S/B	Meltblown Nonwoven	Diaper	Feminine Hygiene	Mask/Air Filter	Industrial Nonwoven
HDPE	ME9180F	20	0.958	●				○	○	○	◎
	SE5311	20	0.953	●				◎	◎	◎	○
	SE5412	30	0.954		●			◎	◎	◎	○
PP	H7700	34	-		●	●		○	○		○
	H7900	230	-				●			◎	○
	H7910	950	-				●	◎			○
	H7912	1200	-				●	◎			○
	H7912A	1200	-				●	◎		◎	○
	H7914	1400	-				●	◎			○
	H7914A	1400	-				●	◎		◎	○

Thank you

