

Evolve®-H Product Data Sheet

Properties		Unit	Testing method*1			Blow		Extruded Pipe	High-Flow Powder		Film		
			JIS K	ISO	ASTM	SP6505	SP65051B	SP5505	SP50800P	SP50500P	SP4505	SP4005	SP3505
General properties	Melt Index	g/10min	7210	1133		0.45	0.45	0.27	135	50	0.4	0.45	0.5
	Density	kg/m ³	7112	1183		957	957	951	951	948	944	940	936
Mechanical properties	Tensile Stress At Yield	MPa	7161 7162	527-1 527-2		27	27	24	-	-	20	19	17
	Elongation At Break	MPa				>17	>17	>33	-	-	>25	>25	>25
	Tensile Modulus	%				>500	>500	>600	-	-	>600	>600	>600
	Flexus Modulus	MPa	7171	178		1300	1300	950	-	-	900	750	600
	Charpy Impact Strength	kJ/m ²	7111	179-1		NB	NB	NB	-	-	NB	NB	NB
	Shore D Hardness	-	7215	868	D2240	64	64	63	-	-	61	60	58
Chemical properties	E.S.C.R	hours	-	-	D1693	>600	>600	>600	-	-	>600	>600	>600
Thermal properties	Vicat Softening Point	°C	7206	306	D1525	126	126	127	-	-	119	117	116
	Melting Point	°C	7121	11357-3	D3418	133	133	131	124	123	128	127	126
	Brittleness Temperature	°C	7216	974	D746A	<-60	<-60	<-60	-	-	<-60	<-60	<-60
Advantages						Stress Cracking Resistance	Stress Cracking Resistance	PE100	Powder	Powder	High Stiffness	High Stiffness	High Stiffness
						Anti-Static Agent	Non Additive	High Impact Strength	Non Additive	Non Additive	High Impact Strength	High Impact Strength	High Impact Strength
									Flowability	Flowability	High Melt Tension	High Melt Tension	High Melt Tension
Major Applications						Detergent Container	Food Container	Water Pipe	Master Batch	Master Batch	Multilayer Film (Middle Class)	Heavy Duty Bag	Heavy Duty Bag
						Shampoo Container	Cosmetic Container	General Pipe			Stiffness Improvement	Industrial Film	Industrial Film
						Food Container							

*1) Specimen preparation according to JIS K7151 (ISO293) and 7152 (ISO294) (Load at 2.16kg)

Melt Index above 1g/10min: Injection molding specimen

Melt Index below 1g/10min: Pressed sheet specimen

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