

**Evolve® (Blown Film) Product Data Sheet**

Testing Items		Unit	Testing Method *1			Film (Blown)							
			JIS K	ISO	ASTM	SP0510	SP0511	SP1020	SP1510	SP1520	SP2020	SP2020H	SP2120
General Physical Properties	Melt Index	g/10min	7210	1133		1.2	1.2	2.0	1.0	2.0	2.1	2.1	2.2
	Density	kg/m <sup>3</sup>	7112	1183		903	903	909	915	913	915	915	921
Mechanical Properties	Tensile Stress At Yield	MPa	7161 7162	527-1 527-2		-	-	-	-	-	-	-	-
	Tensile Stress At Break	MPa				18	18	>19	>18	16	17	17	18
	Elongation At Break	%				>500	>500	>500	>500	350	350	350	360
	Flexus Modulus	MPa	7171	178		110	110	140	160	160	220	220	250
	Charpy Impact Strength	kJ/m <sup>2</sup>	7111	179-1		NB	NB	NB	NB	NB	NB	NB	NB
	Shore D Hardness	-	7215	868		49	49	51	54	54	54	54	56
Chemical Properties	E.S.C.R	hours	-	-	D1693	>1000	>1000	>1000	>1000	>1000	>1000	>1000	>1000
Thermal Properties	Vicat Softening Point	°C	7206	306		85	85	92	98	96	93	93	104
	Melting Point	°C	7121	11357-3		98	98	111	118	116	116	116	119
Characteristics						Very Low Heat Seal Strength	Very Low Heat Seal Strength	Low Heat Seal Property	Low Heat Seal Property	Low Heat Seal Property	Low Heat Seal Property	Low Heat Seal Property	Low Heat Seal Property
						High Impact Strength	High Impact Strength	Pinhole Resistance	High Impact Strength	High Impact Strength	High speed mouldability	High speed mouldability	High Impact Strength
						Non Additive							
Main Application						Modifier	Modifier	Industrial Film	Lamination Film	Automatic Packaging	Lamination Film	Lamination Film	Lamination Film
						Multilayer Film	Multilayer Film		Industrial Film	Agricultural Film	Industrial Film	Industrial Film	Shopping Bag
										Water Quenching Blown Film			

\*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

- ◇ Statistics shown in the information are typical data tested under specific conditions.
- ◇ Applications usage that is mentioned in the information might not be the usage of specified grade in the end product.
- ◇ Pertaining to the usage and application recommendation information, please note the rights of the patentees.
- ◇ In the usage of medical utensile and medicinal products, please be advised to have further consultation.
- ◇ Please understand that the information provided herein is subjected to change without prior notice.