EVASIN   EV3251F DATA SHEET

32 mole%Ethylene Vinyl Alcohol Copolymer
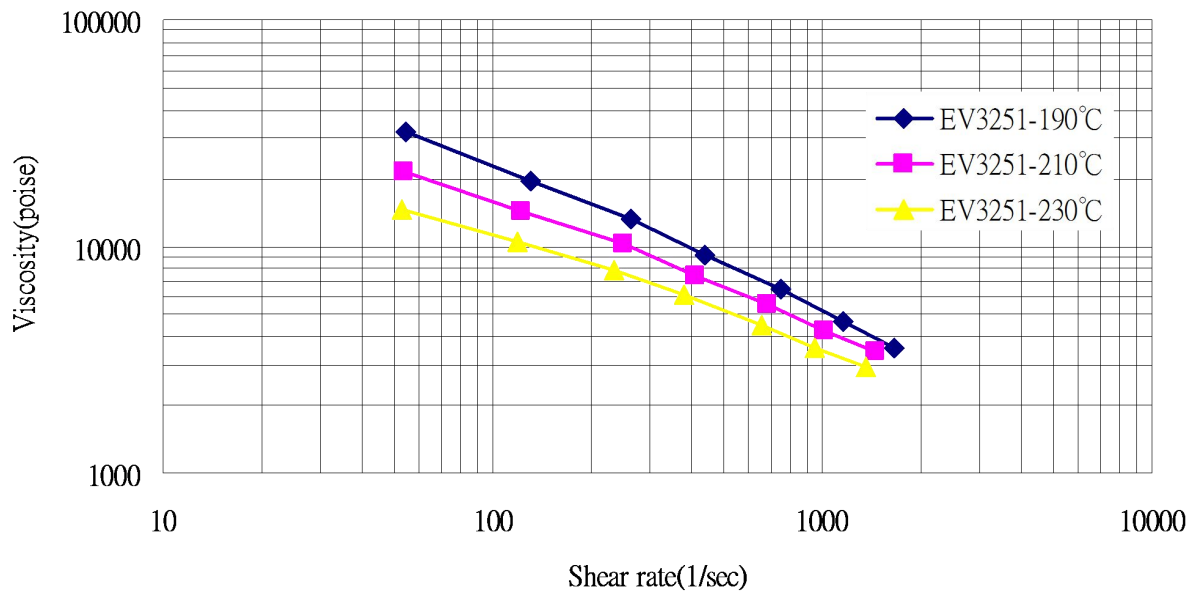
Application

EV3251F with low melt flow index is a standard grade mainly designed for coextrusion blown film application. This resin can also be used in bottle and sheet application. EVASIN EV3251F has excellent barrier to various gases. This resin also shows very excellent thermal stability during long run process .

General Property

Item	unit	Test Method	Value
Mechanical Properties			
Tensile strength at yield	MPa	ISO 527	83.4
Tensile strength at break	MPa	ISO 527	35.8
Elongation at break	%	ISO 527	17.3
Young's modulous	MPa	ISO 527	4510
Flexural modulous	MPa	ISO 178	4200
Flexural strength	MPa	ISO 178	126
Charpy impact strength	KJ/m^2	ISO 179-1	2.43
Rockwell hardness	HRM	ISO 2039-2	97
Density	g/cm^3	ISO 1183	1.18
Thermal Properties and Melt Characteristics			
Melting point	℃	ISO 11357	183
Crystalization point	℃	ISO 11357	159
Glass transition point	℃	ISO 11357	60
Vicat softening point	℃	ISO 306	172
Melt flow index	g/10min(2160g,190℃)	ISO 1133	1.7
	g/10min(2160g,210℃)	ISO 1133	4.1
Gas Barrier Properties			
O_2 Transmission Rate at 20℃ 0%RH	$cm^3.20\mu m/m^2.24Hrs.atm$	ISO 14663-2	0.2
at 20℃ 65%RH			0.3
at 20℃ 85%RH			1.5
Water Vapor Transmission Rate	$cm^3.30\mu m/m^2.24Hrs.atm$ at 40℃ 90%RH	ASTM E96-E	46

Melt Viscosity

EV3251 melt viscosity curve

Example of Processing Temperature Profile

	Barrel 1	Barrel 2	Barrel 3	Barrel 4	Barrel 5	Adapter	Die
EV3251F	180	200	205	215	220	215	215

All data, descriptions and information given herein are carefully evaluated in our analytical department or by reliable polymer institutes and only mean typical characteristics; they are not elements of our COA, but should assist users for quick technical setups. Formulation, processing and final application of end-products based on EVASIN EV3251F are customers´ responsibility only.

Furthermore, users are encouraged to check for the patent situation concerning their projected end products.

May 2018