EASTMAN

Technical Data Sheet

Eastman Eastobond™ Copolyester 19412

Applications

- Compounders
- Mono-layer film food contact
- Multi-layer film food contact
- Multi-layer film non food contact
- Packaging component films
- Packaging components non food contact
- Protective & performance film
- Shrink film food contact
- Shrink film non food contact
- Sporting equipment

Product Description

Eastman Eastobond™ 19412 is a terephthalate-based copolyester. It is identical to our 19411 resin in every aspect, except that the 19412 has been crystallized for drying purposes and ease of handling. Eastman Eastobond™ 19412 may be dried in a desicated drying system at 150 F. It offers excellent organoleptic and gas-barrier properties. Eastman Eastobond™ 19412 has low postextrusion crystallinity and a low softening point, enabling heat-seal bonds to be achieved over a temperature range of 95°C to 205°C.

View our latest video titled " Eastman Eastobond™ multilayer lidding film ".

Typical Properties

Property[a]	Test Method[b]	Typical Value, Units[c]
Film Properties		
Thickness of Film Tested	D 374	0.05 mm (2 mils)
Inherent Viscosity (film)	EMN-A-AC-G-V-1	0.65
Density	D 1505	1.31 g/cm^3
Haze	D 1003	<0.5 %
Gloss @ 45°	D 2457	95
Regular Transmittance	D 1003 Modified	90 %
Elmendorf Tear Resistance	D 1922	0.30 N (30 gf)
Tensile Stress @ Break	D 882	45 MPa (6580 psi)
Elongation @ Break	D 882	<5 %
Tensile Modulus	D 882	2200 MPa (3.2 x 10^5 psi)
Gas Permeability, CO_2 @ 30°C (86°F), 68% RH	MOCON	16.7 cm^3·mm/m^2·24h·atm (42.5 cm^3·mil/100in.^{2}·24h·atm)
Gas Permeability, O_2 @ 30°C (86°F), 0% RH	D 3985	3.1 cm^3·mm/m^2·24h·atm (7.9 cm^3·mil/100in.^{2}·24h·atm)
Water Vapor Transmission Rate[d]	F 372	39 g/m^2·24h (2.6 g/100in.^{2}·24h)
Physical and Thermal Properties		
Inherent Viscosity	EMN-A-AC-G-V-1	0.74

Crystalline Density	D 1505	1.33 g/cm^3
Bulk Density	D 1895	715 kg/m^3 (45 lb/ft^3)
Thermal Conductivity	C 177	0.21 W/m·K
Glass Transition Temperature (T_g)	D 3418	51 °C (124 °F)
Specific Heat		
@ 125°C (257°F)	DSC	1.80 kJ/kg·K (0.43 Btu/lb·°F)
@ 200°C (392°F)	DSC	2.00 kJ/kg·K (0.48 Btu/lb·°F)
@ 25°C (77°F)	DSC	1.15 kJ/kg·K (0.27 Btu/lb·°F)
@ 250°C (482°F)	DSC	2.10 kJ/kg·K (0.50 Btu/lb·°F)
@ 290°C (554°F)	DSC	2.15 kJ/kg·K (0.51 Btu/lb·°F)
@ 75°C (167°F)	DSC	1.60 kJ/kg·K (0.38 Btu/lb·°F)
Melt Density		
@ 250°C (482°F)	D 1238 (Note A- Table 2)	1.2 g/cm^3

[a]*Unless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.*
[b]*Unless noted otherwise, the test method is ASTM.*
[c]*Units are in SI or US customary units.*
[d]*Test conducted at 38°C (100°F) and 90% relative humidity.*

Comments

Properties reported here are preliminary data based on testing of one lot if this material and, therefore, may or may not be representative of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

2/28/2018 11:35:39 AM