ExxonMobil

Optema™ TC 120 ExCo

Ethylene Methyl Acrylate Copolymer Resin

Product Description

Optema TC 120 is an ethylene methyl acrylate copolymer intended for extrusion coating, coextrusion coating and extrusion lamination where good interlayer adhesion between polyethylene, polypropylene, nylon, PVdC or other substrates is required. It offers excellent balance of adhesion onto the substrates and interlayer adhesion with coextruded LDPE and EVA's. It is an excellent heat seal layer in coextrusion and in extrusion coating but additional additives or process modifications may be required to prevent chill roll sticking. Processing Conditions: Excellent results are obtained in extrusion coating at 260°C to 300°C (500°F - 572°F) temperature range. Processing temperatures above 320°C (608°F) are not recommended. Optema EMA can be processed on conventional extrusion equipment designed for extrusion coating LDPE. Their broad thermal stability range offers wide processing conditions window. Water cooling of extruder throat is preferred to avoid hopper bridging. Matte chill roll finishing is recommended for top coating.

General

Additive	▪ Antiblock: No	▪ Slip: No	▪ Thermal Stabilizer: Yes
Applications	▪ Coextrusion Coating ▪ Demanding Heat Seals ▪ Document Plastification	▪ Extrusion Coating ▪ Extrusion Lamination ▪ Food packaging	▪ Industrial Packaging ▪ Non-Woven Coating ▪ Thermal Lamination

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.942	g/cm³	0.942	g/cm³	ExxonMobil Method
Melt Index (190°C/2.16 kg)	6.0	g/10 min	6.0	g/10 min	ASTM D1238
Methyl Acrylate Content	21.5	wt%	21.5	wt%	ExxonMobil Method
Peak Melting Temperature	172	°F	78	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	117	°F	47	°C	ASTM D1525

Coating Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Draw Down					ExxonMobil Method
Constant output at 35 rpm, 563°F (295°C)	400	m/min	400	m/min	
Neck-in					ExxonMobil Method
328 ft/min (100 m/min), Constant output at 35 rpm, 563°F (295°C)	2.4	in	6.1	cm	
656 ft/min (200 m/min), Constant output at 35 rpm, 563°F (295°C)	2.2	in	5.6	cm	