

Product Datasheet



Optema™ TC 121 ExCo

Ethylene Methyl Acrylate Copolymer Resin

Product Description

Optema™ TC 121 is an ethylene methyl acrylate copolymer intended for extrusion coating, coextrusion coating and extrusion lamination where good interlayer adhesion between poylethylene, 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. It is an excellent heat seal layer in coextrusion and in extrusion coating, but additional additives may be required to prevent chill roll sticking.

General

Availability ¹	▪ Latin America	▪ North America	
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
Revision Date	▪ 01/22/2019		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.943 g/cm ³	0.943 g/cm ³	ASTM D1505
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	174 °F	79 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	120 °F	49 °C	ASTM D1525

Coating Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Draw Down Constant output at 35 rpm, 563°F (295°C)	490 m/min	490 m/min	ExxonMobil Method
Neck-in 328 ft/min (100 m/min), Constant output at 35 rpm, 563°F (295°C)	2.8 in	7.2 cm	ExxonMobil Method
656 ft/min (200 m/min), Constant output at 35 rpm, 563°F (295°C)	2.5 in	6.4 cm	

Legal Statement

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

This product is not intended for use in medical applications and should not be used in any such applications.

Processing Statement

Typical values obtained on a pilot coextrusion coating line at ExxonMobil Europe Technical Center at an air gap of 170 mm (6.69 in). Processing temperatures above 320°C (608°F) are not recommended. Optema™ EMA resin can be processed on conventional extrusion equipment designed for extrusion coating LDPE. The broad thermal stability range offers a wide processing conditions window. Water cooling of extruder throat is preferred to avoid hopper bridging. Matte chill roll finishing is recommended for top coating.

Notes

Typical properties: these are not to be construed as specifications.

¹ Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

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ExxonMobil**Optema™ TC 121 ExCo**
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