

Product Datasheet



Optema™ TC 221 ExCo

Ethylene Methyl Acrylate Copolymer Resin

Product Description

Optema™ TC 221 is an ethylene methyl acrylate copolymer that can be used for making alloys, blends and compounds. It can also be injection molded where softness and flexibility are required. It is an excellent grade for coextrusion coating and extrusion lamination where good interlayer adhesion between poylethylene, polypropylene, nylon, PVdC, or other substrates is required.

General

Availability ¹	- Latin America - North America
Additive	- Antiblock: No - Slip: No - Thermal Stabilizer: Yes
Applications	- Coextrusion Coating - Extrusion Lamination - Low Neck In, Low Line Speed Coatings - Demanding Heat Seals - Food Packaging - Masterbatch Base Resin - Extrusion Coating - Industrial Packaging - Thermal Lamination
Revision Date	01/22/2019

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.944 g/cm ³	0.944 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
Methyl Acrylate Content	24.0 wt%	24.0 wt%	ExxonMobil Method
Peak Melting Temperature	164 °F	73 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	114 °F	45 °C	ASTM D1525

Coating Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Neck-in			ExxonMobil Method
328 ft/min (100 m/min), Constant output at 35 rpm, 563°F (295°C)	5.5 in	14 cm	
656 ft/min (200 m/min), Constant output at 35 rpm, 563°F (295°C)	4.2 in	11 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). 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 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.

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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