

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 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. 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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For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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