## Optema ${ }^{\text {TM }}$ TC 221 ExCo Ethylene Methyl Acrylate Copolymer Resin

## Product Description

Optema ${ }^{\text {TM }}$ 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 <br> - Demanding Heat Seals <br> - Extrusion Coating | - Extrusion Lamination <br> - Food Packaging <br> - Industrial Packaging | - Low Neck In, Low Line Speed Coatings <br> - Masterbatch Base Resin <br> - Thermal Lamination |  |
| Revision Date | - 01/22/2019 |  |  |  |
| Resin Properties | Typical Value (English) | Typical Value | (SI) | Test Based On |
| Density | $0.944 \mathrm{~g} / \mathrm{cm}^{3}$ | 0.944 | $\mathrm{g} / \mathrm{cm}^{3}$ | ASTM D1505 |
| Melt Index ( $190^{\circ} \mathrm{C} / 2.16 \mathrm{~kg}$ ) | $5.0 \mathrm{~g} / 10 \mathrm{~min}$ |  | $\mathrm{g} / 10 \mathrm{~min}$ | ASTM D1238 |
| Methyl Acrylate Content | 24.0 wt\% | 24.0 | wt\% | ExxonMobil Method |
| Peak Melting Temperature | $164{ }^{\circ} \mathrm{F}$ | 73 |  | ExxonMobil Method |
| Thermal | Typical Value (English) | Typical Value |  | Test Based On |
| Vicat Softening Temperature | $114{ }^{\circ} \mathrm{F}$ | 45 | ${ }^{\circ} \mathrm{C}$ | ASTM D1525 |
| Coating Properties | Typical Value (English) | Typical Value |  | Test Based On |
| Neck-in <br> $328 \mathrm{ft} / \mathrm{min}(100 \mathrm{~m} / \mathrm{min})$, Constant output at $35 \mathrm{rpm}, 563^{\circ} \mathrm{F}\left(295^{\circ} \mathrm{C}\right)$ | t 5.5 in |  |  | ExxonMobil Method |
| $656 \mathrm{ft} / \mathrm{min}(200 \mathrm{~m} / \mathrm{min})$, Constant output at $35 \mathrm{rpm}, 563^{\circ} \mathrm{F}\left(295^{\circ} \mathrm{C}\right)$ | t 4.2 in |  |  |  |

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 $260^{\circ} \mathrm{C}$ to $300^{\circ} \mathrm{C}\left(500^{\circ} \mathrm{F}-572^{\circ} \mathrm{F}\right)$ temperature range. Processing temperatures above $320^{\circ} \mathrm{C}\left(608^{\circ} \mathrm{F}\right)$ are not recommended. Optema ${ }^{\text {TM }}$ 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.

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