ExxonMobil

# Optema™ TC 114 Cast

## Ethylene Methyl Acrylate Copolymer Resin

### Product Description

Optema TC 114 is an ethylene methyl acrylate copolymer specifically formulated to offer extrusion and property performance for blown and cast film applications. It produces a soft, elastic film with good handling characteristics without additional additives. Optema TC 114 can produce film under 1.0 mil thickness.

### General

| | | | |
|---|---|---|---|
| Availability [1] | ▪ Latin America | ▪ North America | |
| Additive | ▪ Antiblock: 14000 ppm | ▪ Slip: 3000 ppm | ▪ Thermal Stabilizer: Yes |
| Applications | ▪ Disposable Gloves | ▪ Hospital Drapes | ▪ Upholstery Film |
| Revision Date | ▪ 01/01/2017 | | |

| Resin Properties | Typical Value (English) | | Typical Value (SI) | | Test Based On |
|---|---|---|---|---|---|
| Density | 0.947 | g/cm³ | 0.947 | g/cm³ | ASTM D1505 |
| Melt Index (190°C/2.16 kg) | 3.2 | g/10 min | 3.2 | g/10 min | ASTM D1238 |
| Methyl Acrylate Content | 18.0 | wt% | 18.0 | wt% | ExxonMobil Method |
| Peak Melting Temperature | 186 | °F | 86 | °C | ExxonMobil Method |

| Thermal | Typical Value (English) | | Typical Value (SI) | | Test Based On |
|---|---|---|---|---|---|
| Vicat Softening Temperature | 134 | °F | 57 | °C | ASTM D1525 |

| Film Properties | Typical Value (English) | | Typical Value (SI) | | Test Based On |
|---|---|---|---|---|---|
| Tensile Strength at Break MD | 3200 | psi | 22 | MPa | ASTM D882 |
| Tensile Strength at Break TD | 2500 | psi | 17 | MPa | ASTM D882 |
| Elongation at Break MD | 240 | % | 240 | % | ASTM D882 |
| Elongation at Break TD | 770 | % | 770 | % | ASTM D882 |
| Secant Modulus MD | 9400 | psi | 65 | MPa | ASTM D882 |
| Secant Modulus TD | 9100 | psi | 63 | MPa | ASTM D882 |
| Dart Drop Impact | 180 | g | 180 | g | ASTM D1709A |
| Elmendorf Tear Strength MD | 60 | g | 60 | g | ASTM D1922 |
| Elmendorf Tear Strength TD | 340 | g | 340 | g | ASTM D1922 |

| Optical Properties | Typical Value (English) | | Typical Value (SI) | | Test Based On |
|---|---|---|---|---|---|
| Gloss (45°) | 43 | | 43 | | ASTM D2457 |
| Haze | 19 | % | 19 | % | ASTM D1003 |

### 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

Film (2 mil / 50.8 micron) made from Optema TC 114 on a 3.5 inch cast film line with a 5 inch melt curtain, 80°F (27°C) chill roll temperature at a 250 ft/min take-off speed and melt temperature of 390-450°F (199-232°C).

### 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.

ExxonMobil

# Optema™ TC 114 Cast
Ethylene Methyl Acrylate Copolymer Resin

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



exxonmobilchemical.com