# TechResin® 2203F

## *Medium Molecular Weight High Density Polyethylene (MMW-HDPE) Resin Designed For Film Extrusion Applications*

TechResin® 2203F is a medium density resin that provides an excellent balance of tensile, impact, and tear properties in thin film. Processing performance is excellent on high stalk lines.

TechResin® 2203F meets all requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520, covering safe use of polyolefin articles intended for direct food contact.

**Suggested Applications:**

Trash Can Liners Produce Merchandise

**Nominal Physical Properties:**

| PROPERTY | ASTM TEST METHOD | ENGLISH Unit | ENGLISH Value | SI Unit | SI Value |
|---|---|---|---|---|---|
| Density | D1505 | g/cc | 0.937 | g/cc | 0.937 |
| Melt Index, Condition E, | | | | | |
| 190°C/2.16 kg | D1238 | g/10 min. | 0.30 | g/10 min. | 0.30 |
| 190°C/21.6 kg (HLMI) | | g/10 min. | 20.0 | g/10 min. | 20.0 |
| ***Typical Blown Film Properties: *1 Mil (0.025mm)*** | | | | | |
| Dart Drop | D1709 | | | | |
| 26 in (66cm) | | G | 130 | G | 130 |
| Elmendorf Tear | D1922 | | | | |
| MD | | G | 50 | G | 50 |
| TD | | | 500 | | 500 |
| Tensile Yield Strength | D882 | | | | |
| 2 in. (50 mm) per min. | | | | | |
| MD | | psi. | 3100 | MPa | 21 |
| TD | | | 3100 | | 21 |
| Tensile Strength @ Break | D882 | | | | |
| 2 in. (50 mm) per min. | | | | | |
| MD | | psi. | 6100 | MPa | 42 |
| TD | | | 6100 | | 42 |
| Ultimate Elongation | | | | | |
| 2 in. (50 mm) per min. | D882 | | | | |
| MD | | % | 500 | % | 500 |
| TD | | | 600 | | 600 |

* HDPE line. 4:1 BUR, 0.035" gap. 8" die, 56" FLH, 240 lbs/hr, 420°F

The nominal properties reported herein are typical of the product but do not reflect normal testing variance and therefore should not be used for specification purposes.

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