

MARPOL® HDF 504 is a bi-modal HMW-HDPE resin designed for high dart impact strength and good processing characteristics. MARPOL® HDF 504 is well balanced in overall physical properties and provides good stiffness for thin gauge film applications.

| Resin Properties | Typical Value | Typical Value (SI) | Test Method |
|----------------------------|-------------------------|-------------------------|---------------|
| Melt index (190°C/2.16 kg) | 0.04 g/10 min | 0.04 g/10 min | ASTM D 1238 |
| Density | 0.949 g/cm ³ | 0.949 g/cm ³ | ASTM D 1505 |
| Melting Temperature | 268 °F | 131 °C | ASTM D 3418 |
| Film Properties | Typical Value | Typical Value (SI) | Test Method |
| Dart Drop Impact | 210 g | 210 g | ASTM D 1709 A |
| Elmendorf Tear Strength | | | |
| MD | 12 g | 12 g | ASTM D 1922 |
| TD | 25 g | 25 g | |
| Tensile Strength at Break | | | |
| MD | 9000 psi | 62 MPa | ASTM D 882 |
| TD | 4100 psi | 28 MPa | |
| Tensile Strength at Yield | | | |
| MD | 4000 psi | 27 MPa | ASTM D 882 |
| TD | 3700 psi | 25 MPa | |
| Elongation at Break | | | |
| MD | 300 % | 300 % | ASTM D 882 |
| TD | 410 % | 410 % | |
| 1% Secant Modulus | | | |
| MD | 125000 psi | 860 MPa | ASTM D 882 |
| TD | 129000 psi | 890 MPa | |
| Haze | 29 % | 29 % | ASTM D 1003 |
| Gloss (45°) | 22 | 22 | ASTM D 2457 |

Recommended application: T-shirt bags, trash can liners, industrial liners, heavy bags, produce bags on a roll.

Additives: Antiblock – no, Slip – no, Thermal Stabilizer – yes.

This resin complies with FDA regulation 21 CFR 177.1520 (c) 3.1a, and may be used as articles or components of articles intended for packaging or holding food, except during cooking.