

Microthene F

FN50100

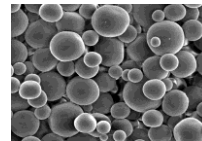
Low Density Polyethylene
Microfine Polyolefin Powder

Melt Index: 22 Density: 0.915



General Description

Microthene F polyolefin powders are ultra-fine, spherically shaped particles with narrow size distribution suitable for use in a broad range of specialty applications. *Microthene F* powders combine the unique properties of a polyolefin resin with a microfine particle size.



Regulatory Status

FN50100 meets the requirements of the Food and Drug Administration regulation, 21 CFR 177.1520. This regulation allows the use of this olefin polymer "... in articles or components of articles intended for use in contact with food..." Specific limitations or conditions of use may apply. Contact your Equistar product safety representative for more information.

Processing Techniques

The microfine size and spherical shape of *Microthene F* powders facilitate dispersion in aqueous or organic systems. Specific suggestions can be made only when equipment, materials, process parameters and conditions of use are known.

Typical Properties

| Polymer Property | Nominal Value | Units | Test Method |
|-----------------------------|---------------|--------------|--------------|
| Melt Index | 22 | g/10 min | ASTM D1238 |
| Density | 0.915 | g/cc | ASTM D1505 |
| Vicat Softening Point | 82.4 / 180.3 | °C / °F | ASTM D1525 |
| Peak Melting Point | 102.4 / 206.1 | °C / °F | ASTM D3418 |
| Low Temperature Brittleness | -55 / -67 | °C / °F | ASTM D746 |
| Tensile Strength @ Break | 9.0 / 1,300 | MPa/psi | ASTM D638 |
| Elongation @ Break | 600 | % | ASTM D638 |
| Flexural Modulus | 220 / 31,900 | MPa/psi | ASTM D790 |
| Hardness, Shore D | 50 / 40 | max / 15 sec | ASTM D2240 |
| Powder Property | | | |
| Particle Shape | Spherical | | |
| Average Particle Size | 20 | micron | ETM Malvern* |
| Particle Size Distribution | 5 - 50 | micron | ETM Malvern* |
| Maximum Moisture Content | 0.1 | % | ETM 156* |

* ETM = Equistar Test Method

These are typical values not to be construed as specification limits.