

## LyondellBasell Alathon® M5363 High Density Polyethylene

Category : Polymer , Thermoplastic , Ethylene Vinyl Acetate , Ethylene Vinyl Acetate; Molded/Extruded

### Material Notes:

**Applications**ALATHON L 4912 is a high molecular weight, high density copolymer with a broad molecular weight distribution. This resin provides excellent stiffness and a good balance of film properties as a single component or in blends. It is designed to process well on grooved feed or smooth bore equipment. L 4912 may be used in a variety of applications such as liners, over-wrap, multi-wall sheeting, merchandise and produce bags.**Regulatory Status**L 4912 meets the requirements of the Food and Drug Administration, regulation 21 CFR 177.1520. This regulation allows the use of 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 sales representative for more information regarding the suitability of specific products for specific applications.**Processing Techniques**Specific recommendations for processing L 4912 can only be made when the processing conditions, equipment and end use are known. For further suggestions, please contact your Equistar sales representative. This product is from the former Equistar product line.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_LyondellBasell-Alathon-M5363-High-Density-Polyethylene.php](http://www.lookpolymers.com/polymer_LyondellBasell-Alathon-M5363-High-Density-Polyethylene.php)

| Physical Properties | Metric       | English                   | Comments  |
|---------------------|--------------|---------------------------|---|
| Density             | 0.953 g/cc   | 0.0344 lb/in <sup>3</sup> | ASTM D1505  |
| Melt Flow           | 6.5 g/10 min | 6.5 g/10 min              | ASTM D1238  |
| Spiral Flow         | 24.1 cm      | 9.50 in                   | Measures the number on inches of flow produced when molten resin is injected into a long, spiral channel (0.625" insert), at a constant injection pressure of 1000 psi with a melt temperature of 440° F; Equistar Test |

| Mechanical Properties     | Metric   | English    | Comments                              |
|---------------------------|----------|------------|---------------------------------------|
| Hardness, Shore D         | 67       | 67         | ASTM D2240                            |
| Tensile Strength at Break | 22.4 MPa | 3250 psi   | ASTM D638                             |
| Tensile Strength, Yield   | 28.3 MPa | 4110 psi   | Crosshead Speed 2 in/min; ASTM D638   |
| Elongation at Yield       | 7.3 %    | 7.3 %      | Crosshead Speed 2 in/min; ASTM D638   |
| 1% Secant Modulus         | 1250 MPa | 181000 psi | Crosshead Speed 0.5 in/min; ASTM D790 |
| 2% Secant Modulus         | 1.04 GPa | 151 ksi    | Crosshead Speed 0.5 in/min; ASTM D790 |

| Thermal Properties                          | Metric  | English | Comments  |
|---|---------|---------|-----------|
| Deflection Temperature at 0.46 MPa (66 psi) | 72.0 °C | 162 °F  | ASTM D648 |

| Thermal Properties      | Metric      | English    | Comments                  |
|-------------------------|-------------|------------|---------------------------|
| Brittleness Temperature | <= -76.0 °C | <= -105 °F | F<sub>50</sub>; ASTM D746 |

Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)  
Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)  
Tel : +86 021-51131842  
Mobile : +86 13061808058  
Skype : lookpolymers  
Address : United North Road 215,Fengxian District, Shanghai City,China