



## Polybutene-1 DP8510M

### Polybutene-1

#### Product Description

Polybutene-1 grade **DP8510M** is a random copolymer of butene-1 with high ethylene content.

This product is primarily used in hot melt adhesive formulations and to improve rheological properties in blends. **DP8510M** is highly compatible with polypropylene due to its similar structure but less compatible in blends with polyethylene, but still easily dispersable.

Its relatively slow kinetics of crystallization allow for an excellent wetting behavior. Its high shear-sensitive flow behavior means that it remains easily dispersable also in even more incompatible polymers like thermoplastic elastomers.

This product is not intended for use in food contact, medical and pharmaceutical applications.

#### Product Characteristics

|                                      |  |
|--------------------------------------|--|
| <b>Status</b>                        | Commercial: Active   |
| <b>Test Method used</b>              | ISO  |
| <b>Availability</b>                  | Europe, North America, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America               |
| <b>Typical Customer Applications</b> | Coatings, Protective, Nonwoven Spunbond, Nonwoven Staple Fibres, Other Industrial, Speciality Film |

| Typical Properties   | Method     | Value | Unit              |
|--|------------|-------|-------------------|
| <b>Physical</b>  |            |       |                   |
| Density  | ISO 1183   | 0.897 | g/cm <sup>3</sup> |
| Melt flow rate (MFR) (190°C/2.16kg)                                | ISO 1133   | 40    | g/10 min          |
| <b>Mechanical</b>  |            |       |                   |
| Flexural modulus   | ISO 178    | 120   | MPa               |
| Tensile Strength at Break  | ISO 8986-2 | 25    | MPa               |
| Tensile Elongation at Break  | ISO 8986-2 | 300   | %                 |
| <i>Note:</i> Measured on specimens conditioned for 10 days at 20°C |            |       |                   |
| <b>Thermal</b>   |            |       |                   |
| Melting temperature  | DSC        | 94    | °C                |
| <i>Note:</i> Tm1   |            |       |                   |
|  |            | 81    | °C                |
| <i>Note:</i> Tm2   |            |       |                   |

#### Additional Properties

Tm2 corresponds with the melting point of crystalline form 2 which is measured immediately after solidification. Tm2 corresponds with the melting point available for each batch on the Certificate of Analysis (COA).

Recommended processing temperatures: 150°C to 180°C. In cases where higher temperatures are required please contact your appropriate technical contact for support.

#### Notes

Typical properties; not to be construed as specifications.