# Riblene® FL 30 I

### Low Density Polyethylene

Versalis S.p.A.

#### Message:

Riblene FL 30 I is a low density polyethylene (LDPE) ideal for blown film extrusion. Riblene FL 30 is characterised by a good balance between processability, mechanical and optical properties.

Films manufactured by Riblene FL 30 are easily heat shrinkable.

Main Applications

Riblene FL 30 I, due to its low gels level, is recommended for general blown film applications, for the production of low gauge film, shrink film, in lamination film and for blend. Thanks its high purity is also recommended for the production in hygienical and pharmaceutical film sector.

| General Information   |  |          |             |  |
|---|--|----------|-------------|--|
| Features  | High purity                            |          |             |  |
|   | Low density                            |          |             |  |
|   | Low speed solidification crystal point |          |             |  |
|   | Optical                                |          |             |  |
|   | Workability, good                      |          |             |  |
|   | Good thermal shrinkage                 |          |             |  |
|   | Compliance of Food Exposure            |          |             |  |
| Uses  | Blown Film                             |          |             |  |
|   | Films                                  |          |             |  |
|   | Laminate                               |          |             |  |
|   | Mixing                                 |          |             |  |
|   | Shrinkable film                        |          |             |  |
| Agency Ratings  | European food contact, not rated       |          |             |  |
| Forms   | Particle                               |          |             |  |
| Processing Method   | Blow film                              |          |             |  |
| Physical  | Nominal Value                          | Unit     | Test Method |  |
| Density   | 0.923                                  | g/cm³    | ISO 1183    |  |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)                     | 2.2                                    | g/10 min | ISO 1133    |  |
| Mechanical  | Nominal Value                          | Unit     | Test Method |  |
| Coefficient of Friction (vs. Itself - Dynamic,<br>Blown Film) | > 0.50                                 |          | ISO 8295    |  |
| Films   | Nominal Value                          | Unit     | Test Method |  |
| Film Thickness - Tested                                       | 40                                     | μm       |             |  |
| Film Thickness - Recommended / Available                      | 25 to 80 μm                            |          |             |  |
| Tensile Modulus   |  |          | ISO 527-3   |  |
| 1% secant, MD: 40 μm, blown film                              | 180                                    | MPa      | ISO 527-3   |  |
| 1% secant, TD: 40 μm, blown film                              | 190                                    | MPa      | ISO 527-3   |  |
|   |  |          |             |  |

| Tensile Stress  |   |                        | ISO 527-3  |
|---|---|------------------------|--|
| MD: Yield, 40 µm, blown film  | 11.0  | MPa                    | ISO 527-3  |
| TD: Yield, 40 µm, blown film  | 11.0  | MPa                    | ISO 527-3  |
| MD: Broken, 40 µm, blown film   | 25.0  | MPa                    | ISO 527-3  |
| TD: Broken, 40 µm, blown film   | 22.0  | MPa                    | ISO 527-3  |
| Tensile Elongation  |   |                        | ISO 527-3  |
| MD: Broken, 40 µm, blown film   | 300   | %                      | ISO 527-3  |
| TD: Broken, 40 µm, blown film   | 650   | %                      | ISO 527-3  |
| Dart Drop Impact <sup>1</sup> (40 μm, Blown Film)   | 130   | g                      | ISO 7765-1   |
| Elmendorf Tear Strength <sup>2</sup>  |   |                        | ISO 6383-2   |
| MD : 40.0 μm  | 80.0  | kN/m                   | ISO 6383-2   |
| TD : 40.0 µm  | 55.0  | kN/m                   | ISO 6383-2   |
|   |   |                        |  |
| Thermal   | Nominal Value                                       | Unit                   | Test Method  |
| Thermal  Brittleness Temperature  | Nominal Value                                       | Unit<br>°C             | Test Method ASTM D746                                      |
|   |   |                        |  |
| Brittleness Temperature   | < -75.0   | °C                     | ASTM D746  |
| Brittleness Temperature  Vicat Softening Temperature  | < -75.0<br>93.0                                     | °C                     | ASTM D746<br>ISO 306/A                                     |
| Brittleness Temperature  Vicat Softening Temperature  Melting Temperature   | < -75.0<br>93.0<br>113                              | °C<br>°C               | ASTM D746 ISO 306/A Internal method                        |
| Brittleness Temperature Vicat Softening Temperature Melting Temperature Optical   | < -75.0<br>93.0<br>113<br>Nominal Value             | °C<br>°C               | ASTM D746 ISO 306/A Internal method Test Method            |
| Brittleness Temperature Vicat Softening Temperature Melting Temperature Optical Gloss (45°, 40.0 µm, Blown Film)  | < -75.0 93.0 113 Nominal Value 72                   | °C<br>°C<br>°C<br>Unit | ASTM D746 ISO 306/A Internal method Test Method ASTM D2457 |
| Brittleness Temperature  Vicat Softening Temperature  Melting Temperature  Optical  Gloss (45°, 40.0 µm, Blown Film)  Haze (40.0 µm, Blown Film)                              | < -75.0 93.0 113 Nominal Value 72 5.5               | °C °C Unit             | ASTM D746 ISO 306/A Internal method Test Method ASTM D2457 |
| Brittleness Temperature  Vicat Softening Temperature  Melting Temperature  Optical  Gloss (45°, 40.0 µm, Blown Film)  Haze (40.0 µm, Blown Film)  Extrusion                   | < -75.0 93.0 113 Nominal Value 72 5.5 Nominal Value | °C °C Unit % Unit      | ASTM D746 ISO 306/A Internal method Test Method ASTM D2457 |
| Brittleness Temperature  Vicat Softening Temperature  Melting Temperature  Optical  Gloss (45°, 40.0 µm, Blown Film)  Haze (40.0 µm, Blown Film)  Extrusion  Melt Temperature | < -75.0 93.0 113 Nominal Value 72 5.5 Nominal Value | °C °C Unit % Unit      | ASTM D746 ISO 306/A Internal method Test Method ASTM D2457 |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533 Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

