# Marlex® HHM TR-131

## Medium Density Polyethylene Saudi Polymers Company

#### Message:

This high molecular weight, hexene copolymer is tailored for blown film applications that require:

Soft feel

Good toughness, impact strength and tear resistance

Good blending characteristics with HDPE HMW resins

Typical applications for HHM TR-131 include:

T-shirt bags

Shopping bags

Trash bags

| General Information   |                             |          |             |
|---|-----------------------------|----------|-------------|
| Features  | High molecular weight       |          |             |
|   | Copolymer                   |          |             |
|   | hexene comonomer            |          |             |
|   | Impact resistance, good     |          |             |
|   | Good tear strength          |          |             |
|   | Good toughness              |          |             |
|   | Soft                        |          |             |
|   | Compliance of Food Exposure |          |             |
|   |                             |          |             |
| Uses  | Films                       |          |             |
|   | Bags                        |          |             |
|   | 3                           |          |             |
| Agency Ratings  | FDA 21 CFR 177.1520(c) 3.2a |          |             |
|   | Europe No 10/2011           |          |             |
|   |                             |          |             |
| Forms   | Particle                    |          |             |
| Processing Method   | Blow film                   |          |             |
| Physical  | Nominal Value               | Unit     | Test Method |
| Density   | 0.938                       | g/cm³    | ASTM D1505  |
| Melt Mass-Flow Rate (MFR) (190°C/2.16   |                             |          |             |
| kg)   | 0.20                        | g/10 min | ASTM D1238  |
| Environmental Stress-Cracking Resistance (100% Igepal, Compression Molded, F50) | > 1000                      | hr       | ASTM D1693B |
| Mechanical  | Nominal Value               | Unit     | Test Method |
| Flexural Modulus - Tangent (Compression   |                             |          |             |
| Molded)   | 760                         | MPa      | ASTM D790   |
| Films   | Nominal Value               | Unit     | Test Method |
| Film Thickness - Tested   | 25                          | μm       |             |
| Tensile Strength <sup>1</sup>   |                             |          | ASTM D882   |

| MD: Yield, 25 μm, blown film                      | 21.0          | MPa  | ASTM D882   |
|---|---------------|------|-------------|
| TD: Yield, 25 µm, blown film                      | 23.0          | MPa  | ASTM D882   |
| Tensile Elongation <sup>2</sup>                   |               |      | ASTM D882   |
| MD: Broken, 25 µm, blown film                     | 500           | %    | ASTM D882   |
| TD: Broken, 25 µm, blown film                     | 660           | %    | ASTM D882   |
| Dart Drop Impact <sup>3</sup> (25 μm, Blown Film) | 170           | g    | ASTM D1709  |
| Elmendorf Tear Strength                           |               |      | ASTM D1922  |
| MD: 25 µm, blown film                             | 30            | g    | ASTM D1922  |
| TD: 25 µm, blown film                             | 350           | g    | ASTM D1922  |
| Thermal   | Nominal Value | Unit | Test Method |
| Brittleness Temperature <sup>4</sup>              | < -75.0       | °C   | ASTM D746A  |
| Additional Information                            |               |      |             |

Additional information

The physical properties were determined on compression moulded specimens that were prepared in accordance with Procedure C of ASTM D4703, Annex A1.

| NOTE |                 |
|------|-----------------|
| 1.   | 51 mm/min       |
| 2.   | 51 mm/min       |
| 3.   | 66 cm           |
| 4.   | Type I specimen |

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

