



## TR144

Polyethylene Product

### Product Description

**TR144** is a polyethylene product suitable for blown film. This material is polymerized with a chromium catalyst and it is designed for blown film applications that require excellent bubble stability and great processability. It is used for household bag and blend modifier for improved stiffness.

### Product Characteristic

|                                      |                            |                                                 |
|--------------------------------------|----------------------------|-------------------------------------------------|
| <b>Test Method Used</b>              | ASTM                       |                                                 |
| <b>Features</b>                      | High Bubble Stability      | Good Processability                             |
| <b>Typical Customer Applications</b> | T-shirt bags<br>Trash bags | Multi-wall liners<br>Blend Modifier (Stiffness) |

### Typical Properties

| Physical                        | Test Method | Unit              | Value |
|---------------------------------|-------------|-------------------|-------|
| Melt Flow Rate (2.16 kg @190°C) | ASTM D1238  | g/10min           | 0.18  |
| Density                         | ASTM D1505  | g/cm <sup>3</sup> | 0.946 |
| Mechanical (Blown Film, 1.0mil) | Test Method | Unit              | Value |
| Dart                            | ASTM D1709  | g                 | 80    |
| Elmendorf Tear MD               | ASTM D1922  | g                 | 15    |
| Elmendorf Tear TD               | ASTM D1922  | g                 | 230   |
| Tensile Strength at Break MD    | ASTM D882   | MPa               | 24    |
| Tensile Strength at Break TD    | ASTM D882   | MPa               | 26    |
| Tensile Elongation at Break MD  | ASTM D882   | %                 | 350   |
| Tensile Elongation at Break TD  | ASTM D882   | %                 | 500   |

**Notes:** Results may vary depending on environmental conditions and /or devices.

Technical Data Sheet

### Processing Recommendation

The actual conditions depends on the type of equipment used.

### Extrusion Note

#### *Fabrication Conditions For Blown Film:*

|                            |                 |
|----------------------------|-----------------|
| Extrusion Melt Temperature | 185 – 200 °C    |
| Screw Size                 | 1.5 in (30mm)   |
| Die Gap                    | 0.06 in (1.5mm) |
| Die Diameter               | 2.5in (50mm)    |
| Blow up Ratio              | 4.0 to 1.0      |

The nominal properties reported herein are representative of the product under these processing conditions, although film properties can vary depending on the specific film-blowing conditions. Therefore, the data should not be used for specification purposes.

### Storage

This material should be stored in dry conditions, protected from sunlight and at temperatures below 50 °C.

### Contact

GS Caltex