# DOW™ LDPE 993I

Low Density Polyethylene Resin

The Dow Chemical Company

Message:

Low Density Polyethylene (LDPE)
Typical applications include toys, lids, and closures
Good gloss, rigidity, excellent flow
Complies with U.S. FDA 21 CFR 177.152 (c) 2.1
Complies with Canadian HPFB No Objection (With Limitations)
Complies with EU, No 10/2011
Consult the regulations for complete details
DOW Polyethylene 993I Low Density Polyethylene Resin is a medium molecular weight distribution homopolymer designed to offer good gloss and rigidity with excellent flow characteristics. This resin has good processability over a wide range of molding conditions.

| General Information | | | |
|---|---|---|---|
| Additive | Sliding agent (400 ppm) | | |
| Agency Ratings | FDA 21 CFR 177.1520(c) 2.1<br>HPFB (Canada) No Objection 2<br>Europe No 10/2011 | | |
| Forms | Particle | | |
| Processing Method | Injection molding | | |
| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
| Specific Gravity | 0.923 | g/cm³ | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 25 | g/10 min | ASTM D1238 |
| Environmental Stress-Cracking Resistance (50°C, 100% Igepal, F50) | < 1.00 | hr | ASTM D1693 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Durometer Hardness (Shore D) | 43 | | ASTM D2240 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Strength | | | ASTM D638 |
| Yield | 10.3 | MPa | ASTM D638 |
| Fracture | 11.7 | MPa | ASTM D638 |
| Tensile Elongation | | | ASTM D638 |
| Yield | 3.0 | % | ASTM D638 |
| Fracture | 40 | % | ASTM D638 |
| Flexural Modulus - 2% Secant | 317 | MPa | ASTM D790 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact (23°C) | 420 | J/m | ASTM D256 |
| Tensile Impact Strength [1] | 252 | kJ/m² | ASTM D1822 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |

| | | | |
|---|---|---|---|
| Deflection Temperature Under Load (0.45 MPa, Unannealed) | 40.0 | °C | ASTM D648 |
| Brittleness Temperature | -33.9 | °C | ASTM D746 |
| Vicat Softening Temperature | 92.8 | °C | ASTM D1525 |
| Melting Temperature (DSC) | 110 | °C | Internal method |
| Peak Crystallization Temperature (DSC) | 100 | °C | Internal method |

| Additional Information |
|---|
| 根据 ASTM D 4976 进行基板模制和测试. |

| NOTE | |
|---|---|
| 1. | Type s |



## 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

WECHAT