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ARYA SASOL POLYMER COMPANY

LOW-DENSITY POLYETHYLENE 1922

LDPE 1922 is a low-density polyethylene, offering a unique combination of consistent process-ability, flexibility and toughness. This grade developed for application that require a good balance between flow properties and mechanical properties. 1922 has been manufactured under SABTEC licensed technology.

| Producer | Characteristic Properties | Applications | Additive |
|--------------------------|---|--|--|
| Arya Sasol Petrochemical | Good toughness- Easy process ability- Producing flexible injection molded articles. | Injection molded articles (toys, household articles, caps, lids, etc.)- Base resin for masterbatches | Antioxidant: Yes Antiblock : No Slip Agent :No |

Typical Properties

| Resin Properties | Unit | Typical Value | ASTM Method |
|--|--------|---------------|---------------|
| High Load Melt Flow Index (190 °C/ 2.16 kg) | dg/min | 22 | ISO 1133 |
| Density | kg/m3 | 919 | ISO 1183 |
| Thermal Properties | Unit | Typical Value | Test Method |
| Deflection Temperature Under Load (0.45 MPa) | °C | 39 | ISO 75 |
| Vicat Softening Temperature (Method A/10N) | °C | 82 | ISO 306 |
| Melting Temperature | °C | 105 | ISO 3146 |
| Melting Enthalpy | J/g | 104 | ISO 3146 |
| Mechanical Properties | Unit | Typical Value | Test Method |
| Stress at Yield | MPa | 8 | ISO 527-1, -2 |
| Stress at Break | MPa | 7 | ISO 527-1, -2 |
| Strain at Break | % | 400 | ISO 527-1, -2 |
| Tensile Modulus | MPa | 175 | ISO 2039-1 |
| Creep Modulus (After 1 hour) | MPa | 80 | ISO 899 |
| Hardness Shore D | - | 45 | ISO 868 |