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# E52009

## HIGH DENSITY POLYETHYLENE

### FOR ORIENTED TAPE & MONOFILAMENT GRADE

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E52009 is a High Density Polyethylene (HDPE) grade with low gel content, excellent orientation characteristic and negligible water carry-over. This grade is recommended for making raffia tapes and monofilaments (Diameter >0.20 mm) with excellent balance of high tenacity and good elongation.

| Typical Characteristics*  |             |          |                 |
|---|-------------|----------|-----------------|
| Property  | Test Method | Unit     | Typical Value** |
| Density (23°C)  | ASTM D1505  | g/cc     | 0.952           |
| MFI (2.16 kg)   | ASTM D1238  | g/10 min | 0.90            |
| Tensile Strength at Yield (MD/TD)                                   | ASTM D882   | MPa      | 34.5/37.5       |
| Ultimate Tensile Strength (MD/TD)                                   | ASTM D882   | MPa      | 50.0/45.0       |
| Elongation at Break (MD/TD)   | ASTM D882   | %        | 900/950         |
| Dart Impact Strength, F <sub>50</sub><br>(38 mm Dart, 66 cm height) | ASTM D1709  | g/μm     | 1.5             |
| Tear Strength (MD/TD)   | ASTM D1922  | g/μm     | 0.6/1.7         |

\*Typical Characteristics and not to be taken as specifications

\*\*Typical Values (Mechanical) with 40 μ film made with 0.75mm die gap & 2.75 BUR

#### Applications

Oriented tapes, woven sacks and monofilaments.

#### Regulatory Information

- Meets the requirements stipulated in standard IS : 10146-1982 on "Specification for Polyethylene for safe use in contact with foodstuffs, pharmaceuticals, and drinking water". It also conforms to the positive list of constituents as prescribed in IS : 10141-1982. The grade and the additives incorporated in it also comply with the FDA:CFR Title 21, 177.1520, Olefin polymers.

#### Storage Recommendations

- Bags should be stored in dry / closed conditions at temperatures below 50°C and protected from UV / direct sunlight.