



# E52009 HIGH DENSITY POLYETHYLENE

## FOR ORIENTED TAPE & MONOFILAMENT GRADE

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> (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.

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