



# F4600

## HIGH DENSITY POLYETHYLENE BLOWN FILM & BLOW MOLDING GRADE

Relene F4600 is a High Density Polyethylene grade suitable for general purpose blown film & extrusion blow moulding applications. Articles blown from this grade exhibit moderate to good stiffness. The resin offers good melt strength and impact resistance.

### TYPICAL CHARACTERISTICS\*

PROPERTY	TEST METHOD	UNIT	TYPICAL VALUE
Density (23°C)	ASTM D 1505	g/cc	0.946
Melt Flow Index (190°C / 2.16 Kg)	ASTM D 1238	g/10 min.	0.38
<b>Film Properties**</b>			
Tensile Strength at Yield (MD / TD)	ASTM D 882	MPa	29.0/26.0
Ultimate Tensile Strength (MD / TD)	ASTM D 882	MPa	45.0/40.0
Elongation at Break (MD / TD)	ASTM D 882	%	780 /950
Dart Impact Strength, F50 (38 mm dart, 66 cm height)	ASTM D 1709	g/ mic.	1.8
Tear Strength (MD / TD)	ASTM D 1922	g/μm	0.4 /4.5

\* Typical characteristics and not to be taken as specifications

\*\* Typical properties measured on 40 μm film made with 0.8 mm die gap & 2.7 BUR

### APPLICATIONS:

- Used for producing blown film and is recommended for use in carry bags and co-extruded film structures
- General purpose blow molded containers.

### Regulatory Information

- Meets the requirements stipulated in standard IS: I0146 on "Specification for Polyethylene for safe use in contact with foodstuffs, pharmaceuticals, and drinking water". It also conforms to IS 16738:2018 "Positive List of Constituents for Polypropylene, Polyethylene and their Copolymers for its Safe Use in Contact with Foodstuffs and Pharmaceuticals"
- 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.

Reliance Industries Limited, Product Application & Research Center (PARC)

RIL Baroda Complex, P. O. Petrochemicals, Vadodara 391346, Gujrat. Tel.: +91-265-6696000. E-mail: [polymer\\_support@ril.com](mailto:polymer_support@ril.com) Website: [www.ril.com](http://www.ril.com)

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