

PRODUCT NEWS

BORSTAR® FB1200 ENHANCED POLYETHYLENE FOR HIGH PERFORMANCE AGRICULTURE SOLUTIONS



BORSTAR® FB1200 FOR HIGH PERFORMANCE AGRICULTURE SOLUTIONS

Borstar® FB1200, produced using proprietary bimodal technology from Borealis, is an enhanced polyethylene (PE) that offers the optimum properties, specifically formulated for agricultural films applications.

Borstar® FB1200 brings superior mechanical properties, excellent melt strength and environmental stress crack resistance (ESCR) as well as a unique matt surface that enables diffused light, leading to higher crop productivity and better quality crops, benefitting the farmers and society.

BOROUGE OFFERS TOTAL SOLUTION FOR AGRICULTURE FILMS

Borstar® FB1200 fulfils the food contact regulations in most countries. Borstar® FB1200 is suitable for recycling using modern methods of shredding and cleaning.

Borstar® FB1200 can be processed in most types of blown film equipment such as Low Density Polyethylene (LDPE), Linear Low Density Polyethylene (LLDPE) or High Density Polyethylene (HDPE) extruders. The balance of draw down properties and bubble stability is superior to conventional LLDPE and LDPE. Thickness of 10 to >2,000µm can be processed with good bubble stability. The product is well suited for co-extrusion.

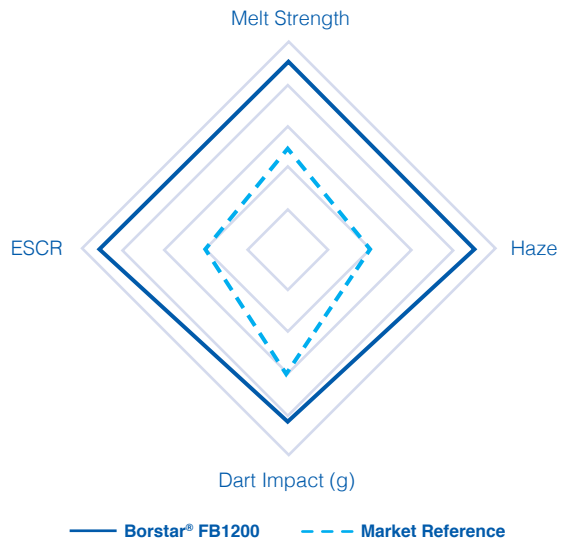
BORSTAR® FB1200 SERVES VARIOUS AGRICULTURE APPLICATIONS

- Greenhouse films
- Low tunnel films
- Mulch films
- Silage films
- Grape cover films
- Aquaculture and pond liners
- Nursery bags

BENEFITS

- Easy processability
- Excellent optical properties
- Superior melt strength
- Superior bubble stability
- Superior dart drop impact
- Better elongation
- Natural haze
- High PAR light

BORSTAR® FB1200 BENCHMARKING



TECHNICAL OVERVIEW

Borstar® FB1200 film properties are measured on 40 micron blown film produced at lab scale extruder with processing conditions: BUR=3:1, FLH=4DD, Die gap=1.2mm.

Borstar® FB1200 contains antioxidant.

Properties	Unit	Borstar® FB1200	Market Reference
Melt Strength	N	4	2
ESCR	Hours	<5,000	≈1,000
Dart Drop	g	<1,000	350
Haze	%	87	13

Borstar® FB1200 Product Properties	Typical Value	Unit	Test Method
Density	921	kg/m ³	ASTM D 792
Melt Flow Rate MRF (190°C/2.16kg)	0.17	g/10min	ASTM D 1238
Tensile Strength at Break – MD/TD	62/49	MPa	ISO 527-3
Tensile Modulus (1% Secant) – MD/TD	250/300	MPa	ASTM D 882
Gloss (45°)	10	–	ASTM D 2457

* Typical properties and data should not be used for specification work

About Borouge A joint venture between ADNOC and Borealis, Borouge is a leading petrochemicals company that provides innovative plastics solutions for the energy, infrastructure, mobility, packaging, healthcare and agriculture industries. With 4.5 million tonnes of annual capacity, Borouge has one of the world's largest integrated polyolefin complexes, with the ambition to further expand its current capacity by 2030.

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