BGT FLEXIFILM™ F952

Technical Data Sheet	(Technical Equivalent to Aramco HDPE F5101 / HDPE Film Grade for High-Strength Blown Film)
High-Density Polyethylene (HDPE)	For Heavy-Duty Blown Film Applications

Regulatory Status
For regulatory compliance information, refer to the BGT FLEXIFILM™ F952 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).
This grade is formulated without food-contact additives and is not certified for direct food contact unless locally approved by the converter.
Not intended for medical or pharmaceutical applications.

Status
Commercial: Active

Availability
Middle East, India, Turkey, Central Asia, Africa
Strategic stock available in Jebel Ali Free Zone (UAE)

Application
Heavy-Duty Shopping Bags, Grocery Sacks, Multi-Wall Sack Liners, Industrial Packaging Films, Agricultural Liners

Market
Retail Packaging Converters, Municipal Waste Management, Industrial Packaging Suppliers, Agricultural Distributors

Processing Method
Blown Film Extrusion (Single-Screw, L/D ⩾ 25:1, standard HMW-HDPE lines)

Attribute
HDPE Film Grade, MFR = 0.05 g/10 min (190°C/2.16 kg), Density = 0.952 g/cm³, High Stiffness (1% Secant Modulus >1250 MPa), Excellent Dart Drop Impact (>180 g), Outstanding Tear Strength (TD >60 g/µm), Optimized for 15–30 µm Film Applications, Ready for Corona Treatment and High-Quality Printing

Physical

Property	**Nominal Value**	**Units**	**Test Method**
Melt Flow Rate (190 °C / 2.16 kg)	0.05	g/10 min	ISO 1133
Melt Flow Rate (190 °C / 21.6 kg)	9	g/10 min	ISO 1133
Density	952	kg/m³	ISO 1183

Property

Property	**Nominal Value**	**Units**	**Test Method**
Dart Impact (F50)	180	g	ISO 7765
Tear Strength (TD) – Elmendorf	60	g/µm	ISO 6383-2
Tear Strength (MD) – Elmendorf	12	g/µm	ISO 6383-2
Tensile Stress at Break (MD)	60	MPa	ISO 527-3
Tensile Stress at Break (TD)	56	MPa	ISO 527-3
Tensile Strain at Break (TD)	550	%	ISO 527-3
Tensile Strain at Break (MD)	400	%	ISO 527-3
1% Secant Modulus (TD)	1500	MPa	ISO 527-3
1% Secant Modulus (MD)	1250	MPa	ISO 527-3

Thermal

Property	Nominal Value	Units	Test Method
Vicat Softening Temperature	125	°C	ISO 306

Product Description

Product Description – BGT FLEXIFILM™ F952

BGT FLEXIFILM™ F952 is a high-molecular-weight HDPE blown film resin engineered for heavy-duty packaging applications across hot, arid, and humid climates. Formulated with a bimodal molecular structure, it delivers high stiffness, excellent dart drop impact resistance, and superior transverse-direction tear strength — critical for shopping bags, grocery sacks, and multi-wall industrial liners. The resin is pre-stabilized for thermal processing and optimized for consistent extrusion on standard HMW-HDPE lines. Films exhibit strong mechanical integrity at 15–30 µm thickness, excellent compatibility with corona treatment, and reliable printability for high-quality branding. Backed by batch-specific data and responsive technical support from Britannia GulfGate Trade.

Availability & Technical Support

For availability, technical information, and application-specific guidance, please contact Britannia Gulfgate Trade (BGT).

Processing Techniques – BGT FLEXIFILM™ F952

Recommended melt temperature range: 200 °C to 235 °C

Standard blown film parameters:

- Screw: Single-screw, L/D ⩾ 25:1, with mixing section
- Drying: Not required if stored in dry conditions (<30% humidity); optional drying at **60 °C for 2 hours** if exposed to high humidity (moisture >300 ppm)
- BUR (Blow-Up Ratio): 3.5–4.5
- Frost Line Height: Adjust to stabilize bubble in ambient temperatures up to 45 °C
- Cooling: Standard air ring with uniform airflow
- Post-Processing: Films are ready for corona treatment (⩾38 dynes/cm) and flexographic/gravure printing
- Note: No slip or antiblock additives included — add as needed per end-use requirements

Availability & Technical Support

For availability, technical information, and application-specific guidance, please contact Britannia Gulfgate Trade (BGT).

✅ Health and Safety

Molten HDPE may release fumes if overheated or exposed to excessive oxygen. Ensure adequate ventilation in processing areas. Avoid skin or eye contact with hot polymer. Use heat-resistant gloves, safety glasses, and protective clothing.

If overheated or exposed to air, molten polymer may degrade, producing fumes that can cause irritation to eyes or the respiratory tract. Ensure adequate ventilation.

The resin is flammable and may produce dense smoke if burned. Store away from ignition sources.

When handling in bulk, polymer dust may form explosive mixtures in air. Conveying systems should be grounded and equipped with dust filtration.

Always consult the Safety Data Sheet (SDS) before handling or processing BGT FLEXIFILM™ F952.

✅ Storage

Supplied in 25 kg UV-protected polyethylene bags on pallets.

Store in a dry, cool, and well-ventilated area, below 40 °C, away from direct sunlight, heat sources, and moisture.

Shelf life: 24 months under recommended conditions.

Keep separate from oxidizing agents and flammable materials.

BGT Royalty™ Commitment

✍️ BGT Royalty™ Commitment
BGT FLEXIFILM™ F952 – A Technical Partnership, Not a Warranty

At Britannia GulfGate Trade, BGT FLEXIFILM™ F952 is engineered as more than a commodity resin. It is a performance-driven HDPE film compound designed for converters who require consistency, mechanical reliability, and responsive technical support in demanding regional conditions — from arid deserts to humid coastal zones.

Unlike global suppliers who offer static data sheets and delayed responses, BGT delivers actionable, regionally adapted guidance and transparent batch-level documentation to support your production and customer commitments.

What Sets BGT FLEXIFILM™ F952 Apart

1. Real Film Performance, Not Just Pellet Data
Every batch of BGT FLEXIFILM™ F952 is accompanied by a Certificate of Analysis (CoA) with verified test results from 15 µm blown film (BUR=4), including dart impact (>180 g), tear strength (>60 g/µm TD), and tensile modulus — not just polymer MFR or density.

2. Processing Guidance Built for Your Reality
Our recommendations are shaped by field experience in high-temperature, dusty, and humid environments across the Middle East, India, and Africa. We provide practical advice on drying, melt temperature, bubble stability, and print readiness — not generic templates copied from European manuals.

3. Clean, Transparent Formulation
BGT FLEXIFILM™ F952 contains only standard antioxidants — no hidden slip, antiblock, or food-contact additives. This gives you full control over downstream formulation, whether you're producing plain industrial sacks or high-quality printed retail bags.

4. Direct Technical Partnership
You work directly with our polymer specialists — no call centers, no regional managers, no time-zone delays. We respond within your working day because your production schedule cannot wait.

The BGT Royalty™ Commitment is a service framework, not a warranty. It reflects our dedication to clarity and partnership — not performance guarantees. Final film suitability, print quality, regulatory compliance, and end-use validation remain the sole responsibility of the converter.

⚠️ Disclaimer

The technical data provided in this document represent typical values obtained under standard laboratory and film testing conditions. These values are intended for guidance only and must not be interpreted as guaranteed specifications or as a warranty of merchantability, fitness for a particular purpose, or compliance with any regulation.

Actual film performance depends on numerous factors beyond BGT's control, including: extrusion equipment design, ambient conditions, additive packages, line speed, film thickness, and post-processing treatments. Users are solely responsible for conducting full-scale production trials, verifying end-product suitability, and ensuring compliance with all applicable local, national, and industry regulations.

Britannia GulfGate Trade makes no express or implied warranties, whether statutory or customary, except as expressly stated in a written supply agreement signed by an authorized representative. All resins are supplied "as is," with the buyer acknowledging full technical and legal responsibility for final product validation and customer acceptance.

Contact us for further inquiries

Britannia GulfGate Trade
Engineering Trust in Infrastructure Polymers

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