

PTC DRAIN BLACK™



Technical Data Sheet

PTC DRAIN BLACK™

High-Density Polyethylene (HDPE)

For Soil & Waste Pipe Applications

💡 "DRAIN BLACK" signals non-pressure drainage — clear, professional, and distinct from your gas or water grades.

Regulatory Status

For regulatory compliance information, refer to the PTC DRAIN BLACK™ Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS). This grade is intended for **non-pressure soil and waste drainage pipes**.

- This grade is not intended for food contact, medical devices, or pharmaceutical applications."

Status

Commercial: Active

Availability

Middle East, India, Turkey, Central Asia, Africa

Application

Soil and Waste Drainage Pipes (Non-Pressure)

Market

Municipal Sewer Networks, Building Drainage, Agricultural Drainage, Industrial Effluent Systems

Processing Method

Pipe Extrusion (Single- or Twin-Screw)

Attribute

High-Stiffness HDPE, Excellent Environmental Stress Crack Resistance (ESCR), High Impact Strength, 2.25% Carbon Black for UV Protection, Designed for Buried Non-Pressure Drainage Applications, Full Compatibility with ISO 13253 and EN 13476-3

Typical Properties

Physical

Property	Nominal Value	Units	Test Method
Melt Flow Rate (190 °C / 5.0 kg)	0.3	g/10 min	ISO 1133-1
Melt Flow Rate (190 °C / 21.6 kg)	8	g/10 min	ISO 1133-1
Density	0.96	g/cm ³	ISO 1183-1
Bulk Density	560	kg/m ³	ISO 60

Mechanical

Property	Nominal Value	Units	Test Method
Tensile Modulus (23 °C)	1100	MPa	ISO 527-1,-2
Tensile Stress at Yield (23 °C, 50	25	MPa	ISO 527-1,-2
Tensile Strain at Yield (23 °C, 50	9	%	ISO 527-1,-2

Thermal

Property	Nominal Value	Units	Test Method
Vicat Softening Temperature	78	°C	ISO 306
Oxidation Induction Time	30	min	ISO 11357-6
DSC Melting Point	130	°C	DSC

Additive

Property	Nominal Value	Units	Test Method
Carbon Black Content	2.25	%	ISO 6964
Color	RAL 9004 (Jet Black)	—	Visual

Product Description

PTC DRAIN BLACK™ is a high-stiffness, high-density polyethylene (HDPE) pipe grade, pigmented in RAL 9004 jet black with 2.25% carbon black for UV stability. Designed specifically for non-pressure soil and waste drainage systems, it delivers excellent environmental stress crack resistance (ESCR), high impact strength, and long-term structural stability in buried applications. Formulated to support pipe manufacturing in accordance with ISO 13253 and EN 13476-3, PTC DRAIN BLACK™ is an ideal drop-in alternative for producers seeking reliable, regionally supported material for municipal and industrial drainage infrastructure.

Availability & Technical Support

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

Processing Techniques

Recommended melt temperature range: 190–230 °C.

For drainage pipe extrusion:

- Screw type: Standard single-screw or barrier screw; ensure adequate mixing for carbon black dispersion
- Cooling: Controlled water cooling to maintain dimensional stability and minimize warpage
- Drying: Not normally required, but if exposed to high humidity, dry at 60 °C for 2 hours (max. moisture: 300 ppm)

Optimize line speed and calibration to achieve consistent wall thickness and ring stiffness in accordance with typical requirements of EN 13476-3.



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 respiratory tract. Ensure adequate ventilation.

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

Always consult the Safety Data Sheet (SDS) before handling or processing PTC DRAIN BLACK™.



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

Britannia GulfGate Trade Drainage Assurance Framework™ (A Technical Partnership – Not a Warranty)

At Britannia GulfGate Trade, PTC DRAIN BLACK™ is supplied as a consistent, high-stiffness HDPE resin for non-pressure drainage pipes – backed by transparency and regional responsiveness.

What Sets Us Apart

1. Drop-In Compatibility

Formulated to match the processing and mechanical profile of Hostalen 5052B, enabling seamless transition without re-qualification.

2. Batch-to-Batch Consistency

Every delivery includes a Certificate of Analysis (CoA) with actual MFR, density, and carbon black content – so you know exactly what you're extruding.

3. Direct Regional Support

Technical dialogue is available directly from our team – no call centers, no time-zone delays. We respond in your working hours.

4. Jebel Ali Availability

Stocked in bonded inventory at Jebel Ali Free Zone, enabling fast, duty-optimized delivery across the Middle East, Africa, and South Asia.

The Britannia GulfGate Trade Drainage Assurance Framework™ is a technical and logistical service. It does not constitute a warranty, nor does it replace EN 13476-3 or ISO 13253 compliance, which remain the responsibility of the pipe manufacturer.



⚠ Disclaimer

Disclaimer

The data presented in this document are based on standard laboratory testing and represent typical values for PTC DRAIN BLACK™. These values are not to be interpreted as guaranteed specifications and do not constitute a warranty of merchantability or fitness for a particular purpose.

Final pipe performance depends on processing conditions, design, installation, and service environment. Users are responsible for verifying suitability for their specific application and obtaining necessary local regulatory approvals for drainage systems.

Britannia GulfGate Trade makes no express or implied warranties except as expressly stated in a written agreement.

Contact us for further inquiries



BRITANNIA GULFGATE TRADE

Britannia GulfGate Trade
Engineering Trust in Infrastructure Polymers

For technical inquiries, batch documentation, or regional support:

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The information in this document is based on current knowledge and testing. It is provided for guidance only and does not constitute a warranty or guarantee of performance. Users are responsible for assessing suitability for their specific application.