Technical Data Sheet

# *Polyflam* 15S3324DCBLK

Polypropylene Copolymer

## Product Description

15S3324DC is a 30% Fiberglass Reinforced, Flame Retardant Polypropylene Copolymer, Black

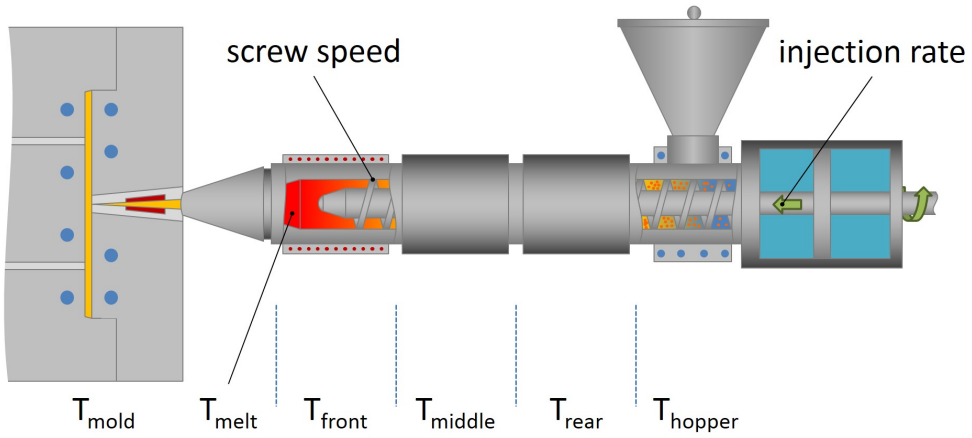
## Regulatory Status

For regulatory compliance information, see 15S3324DCBLK Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

| | |
|---|---|
| **Status** | Commercial: Active |
| **Availability** | North America |
| **Processing Method** | Injection Molding |
| **Forms** | Pellets |
| **Appearance** | Black |
| **Additive** | Flame Retardant |
| **Filler/Reinforcement** | Glass Fiber, 30% |

| Typical Properties | Nominal Value | Units | Test Method |
|---|---|---|---|
| **Physical** | | | |
| Melt Flow Rate, (230 °C/2.16 kg) | 4.0 | g/10 min | ASTM D1238 |
| Density - Specific Gravity | 1.45 | g/cm³ | ASTM D792 |
| **Mechanical** | | | |
| Flexural Strength at Yield, (1.3 mm/min, 23 °C) | 67.7 | MPa | ASTM D790 |
| Tensile Strength at Break, (5.0 mm/min, 23 °C) | 51.8 | MPa | ASTM D638 |
| Tensile Strain at Break, (23 °C, 5 mm/min) | <7.0 | % | ISO 527-2 |
| Flexural Modulus | | | |
| (1.3 mm/min, 23 °C, Tangent) | 6370 | MPa | ASTM D790 |
| (23 °C, 2.0 mm/min, Tangent) | 7230 | MPa | ISO 178 |
| Tensile Elongation at Break, (5.0 mm/min, 23 °C) | <7.0 | % | ASTM D638 |
| Tensile Stress at Break, (23 °C, 5 mm/min) | 52.4 | MPa | ISO 527-2 |
| Tensile Modulus | | | |
| (23 °C) | 6560 | MPa | ASTM D638 |
| (23 °C) | 6590 | MPa | ISO 527-1 |
| Flexural Stress, (23 °C, 2.0 mm/min) | 71.4 | MPa | ISO 178 |
| **Impact** | | | |
| Charpy Impact Strength - Notched | | | |
| (23 °C) | 40 | kJ/m² | ISO 179 |
| (-30 °C) | 19 | kJ/m² | ISO 179 |
| Instrumented Dart Impact | | | |
| (-30 °C, Total Energy, 2.20 m/sec, Brittle Failure) | 13.4 | J | ASTM D3763 |
| (23 °C, Total Energy, 2.20 m/sec, Brittle Failure) | 13.8 | J | ASTM D3763 |
| Notched Izod Impact | | | |
| (23 °C) | 190 | J/m | ASTM D256 |
| (-30 °C) | 110 | J/m | ASTM D256 |

| Thermal | | | |
|---|---|---|---|
| Deflection Temperature Under Load Unannealed (0.45 MPa) | 155 | °C | ISO 75-2/B |
| Deflection Temperature Under Load Unannealed (1.80 MPa) | 131 | °C | ISO 75-2/A |
| Deflection Temperature Under Load Unannealed (264 psi) | 127 | °C | ASTM D648 |
| Deflection Temperature Under Load Unannealed (66 psi) | 146 | °C | ASTM D648 |
| Coefficent of Linear Thermal Expansion (CLTE), Flow (TMA), (35 °C) | 2.0E-5 | cm/cm/°C | ASTM E831 |
| Coefficent of Linear Thermal Expansion (CLTE), Perpendicular (TMA), (35 °C) | 1.3E-4 | cm/cm/°C | ASTM E831 |
| RTI Str | | | |
| (1.5 mm) | 65.0 | °C | UL 746B |
| (3.0 mm) | 65.0 | °C | UL 746B |
| (2.5 mm) | 65.0 | °C | UL 746B |
| **UL Information** | | | |
| Flame Rating | | | |
| (1.5 mm) | V-1 | | UL 94 |
| (3.0 mm) | V-0 | | UL 94 |
| (3.0 mm) | 5VA | | UL 94 |
| (2.5 mm) | 5VA | | UL 94 |
| (2.5 mm) | V-0 | | UL 94 |




| Injection Parameters | Nominal Value | Units |
|---|---|---|
| Drying Time | 2.0 to 4.0 | hr |
| Drying Temperature | 82 | °C |
| Nozzle Temperature | 177 to 227 | °C |
| Screw Speed | 20 to 60 | rpm |
| Processing (Melt) Temp | 177 to 227 | °C |
| Front Temperature | 177 to 227 | °C |
| Middle Temperature | 177 to 227 | °C |
| Rear Temperature | 177 to 204 | °C |
| Injection Rate | Moderate | |
| Back Pressure | <0.689 | MPa |
| Mold Temperature | 32 to 66 | °C |
| Cushion | 6.35 to 12.7 | mm |

## Notes

These are typical property values not to be construed as specification limits.

## Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

## Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.



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