CONTINUUM™ DGDC-2480 BK

Bimodal Polyethylene Resin

The Dow Chemical Company

Message:

CONTINUUM™ DGDC-2480 BK Bimodal Polyethylene Resin is produced using UNIPOL™ II process technology. This product may be utilized for pipe applications where long-term hydrostatic strength combined with outstanding resistance to slow crack growth and rapid crack propagation are desired. Suitable applications include natural gas distribution pipes, industrial piping, mining, sewage, and municipal water service lines.
Industrial Standards Compliance:
ASTM D 3350: cell classification
Black - PE445574C (See NOTES 1)
Plastics Pipe Institute (PPI): TR-4
Black Pipe - CONTINUUM™ DGDC-2480 BK Bimodal Polyethylene Resin (See NOTES 1)
ASTM PE4710 pipe grade - 1600psi HDB and 1000psi HDS @ 73°F, and 1000psi HDB @ 140°F
NSF International: Standard 14 and 61
Black Pipe - DGDC-2480 BK (See NOTES 1)
Consult the regulations for complete details.
NOTES:
(1) The first five numbers of the cell classification are based on natural resin. The last number and letter are based on black resin (natural resin plus 6.5% DFNF-0092).

General Information			
Additive	Processing Aid		
Agency Ratings	ASTM D 3350 PE445574C ASTM PE4710 NSF 14 NSF 61 PPI TR-4		
Forms	Pellets		
Processing Method	Profile Extrusion		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity			ASTM D792
Natural	0.949	g/cm³	
Black [1]	0.959	g/cm³	
Melt Mass-Flow Rate (MFR)			ASTM D1238
190°C/2.16 kg	0.080	g/10 min	
190°C/21.6 kg	8.5	g/10 min	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [2] (Yield)	> 24.1	MPa	ASTM D638
Tensile Elongation [3] (Break)	> 500	%	ASTM D638
Flexural Modulus	1030	MPa	ASTM D790B
Resistance to Rapid Crack Propagation, Pc [4]			
Calculated, Full Scale : 0°C	> 46.0	bar	ISO 13478
S-4 : 0°C	> 12.0	bar	ISO 13477

Resistance to Rapid Crack Propagation, Tc - S-4 @ 10 bar [5]	< -17	°C	ISO 13477
Slow Crack Growth PENT [6]	> 5000	hr	ASTM F1473
Thermal Stability	> 220	°C	ASTM D3350
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact [7] (23°C)	490	J/m	ASTM D256A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Brittleness Temperature [8]	< -75.0	°C	ASTM D746A

NOTE	
1.	Natural resin extruded under proper conditions with carbon black masterbatch DFNF-0092 (6.5%).
2.	Compression molded parts prepared according to ASTM D 4703 Procedure C unless otherwise noted in the test method. Properties will vary with changes in molding conditions and aging time.
3.	Compression molded parts prepared according to ASTM D 4703 Procedure C unless otherwise noted in the test method. Properties will vary with changes in molding conditions and aging time.
4.	Pipe diameter of 10 inch IPS (25.4 cm) and Standard Diameter Dimension Ratio (SDR) 11.
5.	Pipe diameter of 10 inch IPS (25.4 cm) and Standard Diameter Dimension Ratio (SDR) 11.
6.	Compression molded parts prepared according to ASTM D 4703 Procedure C unless otherwise noted in the test method. Properties will vary with changes in molding conditions and aging time.
7.	Compression molded parts prepared according to ASTM D 4703 Procedure C unless otherwise noted in the test method. Properties will vary with changes in molding conditions and aging time.
8.	Compression molded parts prepared according to ASTM D 4703 Procedure C unless otherwise noted in the test method. Properties will vary with changes in molding conditions and aging time.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China