AXELERON™ GP D-0588 BK CPD

Black Low Density Polyethylene Compound for Cable Jacketing

The Dow Chemical Company

Message:

AXELERON™ GP D-0588 BK CPD, with a density of 0.93, and a melt index of 0.2, is a prime quality telephone telecom cable black jacketing compound ("CPD"). It offers excellent environmental stress cracking resistance, outdoor weatherability, toughness, low temperature performance, and extrudability. AXELERON™ GP D-0588 BK CPD can be used by wire and cable manufacturers for the entire range of telephone telecom cable sizes and configurations. It is suitable for both aircore and jelly-filled construction, and in both aerial and buried applications.
Specifications
AXELERON™ GP D-0588 BK CPD meets the following raw material specifications:
ASTM D 1248 IC-5 Grades, E5, J1 J3
ISO 1872-1-PE, KCHL, 23-D003
Federal LP-390 C, III-L, Grades 2,3, and 4, Category 5
REA PE-22, 38, 39, 86, 89, 90
Cable jacketed with AXELERON™ GP D-0588 BK CPD using sound commercial extrusion practices, should meet the following specifications:
ICEA: S-61-402; NEMA WC 5
ANSI: C8. 35
ASTM: D 2308
British Telecommunications plc M132
Telcordia GR 421 Core
ANSI/ICEA S-84-608-1988
EN 50290-2-24, grade LD
IEC 60708
BS 6234: Type 03C, TS1

General Information	
Uses	Telephone lead wire sheath material
	Cable sheath
	Wire and cable applications
	Wire sheath
	Coaxial cable sheath material
Agency Ratings	ANSI C 8.35
	ASTM D 1248, I, Class C, Cat. 5, Grade E5
	ASTM D 1248, I, Class C, Cat. 5, Grade J3
	BS 6234 Type 03C, TS1
	EN 50290-2-24
	FED L-P-390C, Type III, Class L, Category 5, Grade 4
	ICEA S-61-402
	ICEA S-84-608
	IEC 60708
	ISO 1872 PE KCHL 23D003
	REA PE-22
	REA PE-38
	REA PE-39
	REA PE-89

Forms	Particle		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	0.931	g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.21	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance			
10% Igepal, F0 [1]	> 2000	hr	IEC 60811-4-1/B
100% Igepal, F20	> 500	hr	ASTM D1693
Carbon Black Content	2.6	%	ASTM D1603
Absorption Coefficient - (kAB/m)	> 400		ASTM D3349
Oxidation Induction Time			ISO 11357-6
200°C	74	min	ISO 11357-6
210°C	30	min	ISO 11357-6
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D, 15 sec)	50		ISO 868
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [2]			ASTM D638
Yield	9.31	MPa	ASTM D638
--	17.6	MPa	ASTM D638
Tensile Elongation [3] (Break)	800	%	ASTM D638
Thermal	**Nominal Value**	**Unit**	**Test Method**
Brittleness Temperature	< -90.0	°C	ASTM D746
Electrical	**Nominal Value**		**Test Method**
Dielectric Constant (1 Hz)	2.48		ASTM D1531
Dissipation Factor (1 MHz)	3.0E-4		ASTM D1531
Extrusion	**Nominal Value**	**Unit**	
Melt Temperature	204 - 227	°C	

Extrusion instructions

AXELERON™ GP D-0588 BK CPD provides excellent surface finish and outstanding output rates over a broad range of conditions. For optimum results, use melt extrusion temperatures in the suggested range of 400°F-440°F (200°C-235°C). However, specific recommendations for processing conditions can be determined only when the application and type of processing equipment are known.This product contains a low moisture absorption carbon black and does not normally need drying. Under extremely high moisture conditions, there is some tendency for the carbon black to absorb moisture. If needed, hopper drying at 150°F-160°F (67°C-71°C) is recommended.

NOTE	
1.	Without oven conditioning.
2.	Type 4, 51mm/min
3.	Type 4, 51mm/min

Recommended distributors for this material

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