DOW™ Wire & Cable DHDA-7700 BK
Thermoplastic Semiconductive Shielding Compound

Overview

DHDA-7700 BK is a specially formulated thermoplastic compound designed for use as a semiconductive shield in medium voltage cable applications. DHDA-7700 BK was specifically developed utilizing a special acetylene carbon black to provide a supersmooth surface to achieve best in class performance and yielding a more perfect interface between the extruded shield and the insulation.

DHDA-7700 BK is also useful for start-up, shut down, transition, and purging of medium and high voltage (5 kV and higher) power cable semiconductive shield extruders. DHDA-7700 BK is compatible with the DOW ENDURANCE™ HFDA-0800 BK and HFDA-0801 BK supersmooth semiconductive shields and has a high degree of cleanliness required for these applications.

Physical	Nominal Value (English)		Nominal Value (SI)		Test Method
Density	1.14	g/cm³	1.14	g/cm³	ASTM D792

Additional Information

Cleanliness Requirements

DHDA-7700 BK is designed to meets strict standards of smoothness established for a semiconductive shield compound. Throughout the production process, the product is tested to ensure smoothness. Extruded tapes are scanned by an automatic inspection system in a clean room. The tape smoothness data is managed using an acceptance

sampling plan, which ensures that the shipping container meets or exceeds the product's smoothness standard.

Storage

The environment or conditions of storage greatly influences the recommended storage time. Storage should be in accordance with good manufacturing practices. If proper warehousing and storage temperatures [dry conditions, between 50°F and 86°F (10°C and 30°C) in temperature] are utilized, this product may be stored by the customer for up to one year. It is recommended that the practice of using the product on a first-in / first-out basis be established. Storage under extreme conditions may affect the quality, processing, or performance of the product.

Extrusion	Nominal Value (English)		Nominal Value (SI)	
Melt Temperature	240 to 280	°F	116 to 138	°C

Extrusion Notes

DHDA-7700 BK is a thermoplastic compound designed to be compatible with vulcanizable power cable semiconductive shield compounds produced by The Dow Chemical Company. Although DHDA-7700 BK is a thermoplastic material and can withstand higher extrusion melt temperatures than vulcanizable compounds, melt extrusion temperatures in the range of 240 to 280°F (116 to 140°C) are recommended. This melt temperature range is recommended to reduce the potential for premature crosslinking (or scorch) in the vulcanizable compound when transitioning to or from DHDA-7700 BK. Process modifications should not be required during transitions to or from the DHDA-7700 BK.

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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