



SI-LINK™ DFDB-5480 NT

Catalyst Masterbatch for Moisture Curable Power Cable Insulation

Overview

DFDB-5480 NT is a catalyst masterbatch developed to be used in conjunction with moisture curable ethylene-silane copolymers such as Dow SI-LINK™ Polyethylene DFDA-5451 NT by providing the catalyst necessary to crosslink these compounds. Because the catalyst masterbatch is shipped separately from the ethylene-silane copolymer, both components are very shelf stable. Crosslinking of this insulation system only occurs after hot melt mixing of the two components and exposure to moisture.

DFDB-5480 NT provides excellent scorch resistance when mixed with DFDA-5451 NT.

DFDB-5480 NT includes sufficient antioxidant so that the insulation system provides excellent processing and product performance. This insulation system is designed to be effective either for copper or aluminum conductors.

The recommended level of usage for DFDB-5480 NT is 5% by weight. The specific level will depend on the process and conditions used. For your particular application, contact your Dow representative for recommended levels.

Additive

- Antioxidant

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.930 g/cm ³	0.930 g/cm ³	ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	3.0 g/10 min	3.0 g/10 min	ASTM D1238

Additional Information

Nominal property values above represent tests on molded stress-relieved slabs. Cure times were 15 minutes at 175°C.

Extrusion	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	140 to 160 °F	60 to 71 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr

Extrusion Notes

Though the packaging used for DFDB-5480 NT is specifically designed to reduce moisture penetration, drying for 4 to 6 hours at 140°-160°F (60°-70°C) in a hopper drier with dehumidified air is recommended for optimum results. If desired, it may be dry mixed with DFDB-5410 BK carbon black masterbatch prior to being dried.

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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