

AXELERON™ CX A-0012 NT CPD Nucleating Agent Masterbatch

Overview

AXELERON™ CX A-0012 NT CPD is a masterbatch for use as a nucleating agent in gas-injection applications. It is specially designed for easy incorporation into our insulation compound ("CPD") AXELERON™ CX 6944 NT CPD HDPE and AXELERON™ CX 1253 NT CPD LDPE. When used correctly, it allows the formation of small, uniformly distributed cells. The masterbatch is a 10% concentrate of an exothermic chemical blowing agent in a high pressure LDPE base resin. It should be used at 0.1 to 0.3% nucleating agent or 1-3% masterbatch concentration. Typical applications include CATV drop cable type 59, 6, 7 and 11.

| Physical | Nominal Value | (English) | Nominal Value | (SI) | Test Method |
|--|---------------|-----------|---------------|----------|-------------|
| Density | 0.970 | g/cm³ | 0.970 | g/cm³ | ASTM D792 |
| Melt Mass-Flow Rate ¹ (190°C/2.16 kg) | 2.0 | g/10 min | 2.0 | g/10 min | ASTM D1238 |

Extrusion Notes

AXELERON™ CX A-0012 NT CPD is designed to be extruded with Dow's gas injection compounds AXELERON™ CX 6944 NT CPD HDPE and AXELERON™ CX 1253 NT CPD LDPE. It is normally added at 1-3% masterbatch concentration into a blend of 60-80% 6944 and 20-40% 1253.

While the exact temperature profile required will depend upon the screw design and construction being made, the following extrusion temperature profile represents a good starting point:

Feed Zone: 285-300°F (140-150°C)
Transition Zone: 340-355°F (170-180°C)
Gas Injection Point: 340-375°F (170-190°C)

• Metering Zone: 285-340°F (140-170°C); depends on diameter insulation

• Crosshead and Die: 265-320°F (130-160°C); depends on diameter insulation

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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¹ Base Resin

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