

Polyethylene
Visico™ **ME4425/LE4462**
Silane Crosslinkable Insulation Compound

Description

Visico ME4425/LE4462 is a scorch retardant silane crosslinkable MDPE track resistant cable insulation.

ME4425/LE4462 is a combination of **ME4425**, a Medium Density VISICO base resin and a masterbatch. **LE4462**, which contains catalyst, carbon black, UV stabilizers and antioxidants. The **LE4462** masterbatch accelerates the moisture-induced crosslinking reaction and imparts track resistance, resistance to degradation by ultraviolet light and thermal stability to the final product.

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density (Base Resin)	930 kg/m ³	ASTM D 1505
Melt Flow Rate (190 °C/2,16 kg) ¹	1,0 g/10min	ASTM D 1238
Tensile Strength	2.350 psi	ASTM D 638
Tensile Strength	16 MPa	
Retention of Tensile Properties After Ageing (168 h, 136 °C)	85 %	ASTM D 638
Brittleness temperature	<= 76 °C	ASTM D 746
Hardness, Shore D	51	ASTM D 2240

¹ Base Resin

Electrical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
DC Volume Resistivity	10 POhm.cm	ASTM D 257
Dielectric Strength	> 800 V/mil	ASTM D 149
Dielectric Strength	> 20 kV/mm	

Processing Techniques

Following parameters should be used as guidelines:

LE4462 should be added to **ME4425** by dry blending in the hopper at a rate of 10 parts **LE4462** to 90 parts **ME4425**. **ME4425/LE4462** is highly scorch retardant and can be processed, for extended periods without scorching in the extruder or crosshead, over a wide range of extrusion conditions. PE or PVC extruders can be used and melt temperatures in the range 160 - 210°C (320 - 410°F) are appropriate.

Compared to other silane crosslinkable systems, scorch retardant Visico compounds show the following major advantages:

- Longer runs

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- No need to continuously bleed to the floor while making -tooling changes
- Excellent surface finish
- Little or no die drool
- Low odor levels during processing
- Faster crosslinking
- Improved heat deformation
- No conductor staining
- Extended shelf life

Typically the following process conditions are used:

Barrel 1	160 °C 320 °F
Barrel 2	170 °C 340 °F
Barrel 3	180 °C 350 °F
Barrel 4	190 °C 375 °F
Die head	190 °C 375 °F

Packaging

- Base material
- | | |
|-------------------------|-----------|
| Package: | Octabins |
| - Catalyst master batch | |
| Package: | Smallbins |

Storage

Visico ME4425/LE4462 has a shelf life of 12 months from delivery date if stored in unopened original packages, under dry and clean conditions at temperatures between 10 - 30 °C (50 - 85 °F).

More information on storage is found in our "Safety data sheet" / "Product safety information sheet".

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Visico ME4425/LE4462**Disclaimer**

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