Visico™ LE4421/LE4432

Polyolefin

Borealis AG

Message:

Visico LE4421/LE4432 is a scorch retardant, moisture-crosslinking polyethylene compound for low voltage insulation.
The combination of a VISICO base material, LE4421, and a black tin catalyst masterbatch, LE4432, provides a highly scorch retardant compound with excellent thermal stability. LE4421/LE4432 contains a patented scorch retardant additive (SRA) that increases the processing window for a moisture crosslinking compound and minimizes the tendency for premature crosslinking in the extruder, head or die.
LE4432 should be added to L E4421 directly in the extruder hopper by dry blending at a ratio of 10 parts LE4432 to 90 parts LE4421. LE4432 also provides, in addition to catalyst, a stabilization package containing suitable antioxidants, a metal deactivator and a 25% loading of a fine particle size carbon black for UV weather resistance. Properly mixed, during the extrusion process, LE4421/LE4432 exhibits excellent thermal stability to oxidation. The final insulation or jacketing will also contain 2.5% of a suitable carbon black to ensure satisfactory UV weathering stability.
LE4421.LE4432 is recommended for use as insulation for low voltage control cables and power cables up to 6 kv in rating.
Visico LE4421/LE4432 can meet a variety of international specifications and standards when produced using sound commercial extrusion practice.
NBN C 33-321
ASTM D 2655
EC 502
NF C32-090
NF C33-210
Underwriters Laboratories Standards 854 for types USE and USE-2
Canadian Standards Association C22.2 No. 1790-00-Airport Series Lighting Cables and C22.2 No. 38 Cable Type RW-90 Outdoor
HD 603 S1

General Information	
Additive	Antioxidant
	Carbon Black (3%)
	Metal Deactivator
	Scorch Resistant
	UV Stabilizer
Features	Antioxidant
	Crosslinkable
	Good Thermal Stability
	Good UV Resistance
	Good Weather Resistance
	Oxidation Resistant
Uses	Cable Jacketing
	Low Voltage Insulation
	Power Cable Jacketing
Wire Types	RW-90
	USE
	USE-2
Agency Ratings	ASTM D 2655

CSA C-22.2 No. 1790-00

CSA C-22.2 No. 38

DIN VDE 0207, 2XI1

HD 603 S1

NFC 32-090

NFC 33-210

UL 854

Forms	Pellets		
Processing Method	Extrusion		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity			ASTM D792
-- [1]	0.923	g/cm³	
-- [2]	1.05	g/cm³	
Melt Mass-Flow Rate (MFR) [3]	0.90	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	15.0	MPa	ASTM D412
Tensile Elongation (Break)	300	%	ASTM D412
Aging	**Nominal Value**	**Unit**	
Retention of Tensile Properties (121°C) [4]	> 90	%	
Hot Creep			ICEA T-28-562
150°C [5]	< 5.0	%	
150°C [6]	< 50	%	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	> 22	kV/mm	
Dielectric Constant (23°C, 60 Hz)	2.30		ASTM D2520
Dissipation Factor (23°C, 60 Hz)	5.0E-4		ASTM D150
Extrusion	**Nominal Value**	**Unit**	
Cylinder Zone 1 Temp.	146	°C	
Cylinder Zone 2 Temp.	163	°C	
Cylinder Zone 3 Temp.	171	°C	
Cylinder Zone 4 Temp.	171	°C	
Die Temperature	177	°C	
NOTE			
1.	LE4421		
2.	LE4432		
3.	LE4421		
4.	After Ageing 7 d		
5.	Permanent deformation, 0.20 MPa		
6.	Elongation under load, 0.20 MPa		

Recommended distributors for this material

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