

Visico™ LE4427/Ambicat™ LE4476

交联聚乙烯
Borealis AG

产品说明

Visico LE4427 / Ambicat LE4476 is a silane crosslinkable natural compound designed for weather resistant covering/insulation of overhead and façade cables.

The black base material Visico LE4427 in combination with the catalyst masterbatch Ambicat LE4476 will accelerate the moisture-induced crosslinking reaction. The system is highly active and crosslinks quickly at ambient conditions, in sauna or in hot water.

When properly mixed, addition of 5 parts of Ambicat LE4476 to 95 parts of Visico LE4427, insulation with excellent thermo-oxidative stability, also in contact with copper as well as aluminium, is achieved.

Visico LE4427 / Ambicat LE4476 contains antioxidant, metal deactivator and a drying agent. Visico LE4427 contains a permanent scorch retardant additive, ensuring safe processing and enabling the use of highly active crosslinking catalyst.

Visico LE4427 / Ambicat LE4476 in combination meets the applicable requirements as below when processed using sound extrusion and testing procedure:

- ANSI/ICEA S-70-547
- ASTM D 1248 Type II, Class C, Category 4
- HD 603 S1
- HD 626 S1 (TIX-2, TIX-3, TIX-5, TIX-7, TIX8)
- NF C33-209 part 6-2 (Except messenger wire)
- NEMA WC 70
- NEMA WC 71

The standards referred to above is a selection and is not complete coverage of all applicable standards. Contact your Borealis representative for additional information.

The black base material Visico LE4427 in combination with the catalyst masterbatch Ambicat LE4476 is a readymade two-component system which crosslinks quickly at ambient conditions, in sauna or in hot water. The base material Visico LE4427 is a black filled low density polyethylene, copolymerised with vinyl silane and designed for overhead cable covering/insulation. Visico LE4427 contains a well dispersed carbon black to provide the necessary protection for outdoor weatherability according to the French specification NF C 33 209 part 6-2, Cable de Façade. The catalyst masterbatch, Ambicat LE4476, contains a novel, patented, environmentally friendly crosslinking catalyst and is completely free from heavy metals.

总体

添加剂	<ul style="list-style-type: none"> • 金属减活剂 • 抗划伤 	<ul style="list-style-type: none"> • 抗氧化性 • 碳黑 (3%) 	
性能特点	<ul style="list-style-type: none"> • 低密度 • 共聚物 • 较低的出模膨胀 • 抗氧化性 	<ul style="list-style-type: none"> • 可加工性, 良好 • 可交联 • 快速硫化 • 良好的表面光洁度 	<ul style="list-style-type: none"> • 耐气候影响性能良好 • 热稳定性, 良好
用途	<ul style="list-style-type: none"> • 电缆护套 • 绝缘材料 	<ul style="list-style-type: none"> • 母料 • 室外应用 	
机构评级	<ul style="list-style-type: none"> • ANSI/ICEA S-70-547 • ASTM D 1248, II, Class C, Cat. 4 	<ul style="list-style-type: none"> • HD 603 S1 • HD 626 S1, TIX-3, TIX-2, TIX-5, TIX8 	<ul style="list-style-type: none"> • NEMA WC-70, WC-71 • NFC 33-209, Part 6-2 (Except messenger wire)
外观	<ul style="list-style-type: none"> • 黑色 		
形式	<ul style="list-style-type: none"> • 颗粒 		
加工方法	<ul style="list-style-type: none"> • 挤出 		

物理性能	额定值	单位制	测试方法
密度 ²	0.935	g/cm ³	ISO 1183
熔流率 (190°C/2.16 kg)	1.0	g/10 min	ISO 1133
抗环境应力开裂 (条件 B, 50°C, 10% Igepal, F20)	> 96.0	hr	IEC 60811-4-1/B
炭黑含量	2.5	%	ISO 6964
机械性能	额定值	单位制	测试方法
拉伸应力 (屈服)	> 15.0	MPa	ISO 527-2/250
拉伸应变 (断裂)	> 300	%	ISO 527-2/250
热性能	额定值	单位制	测试方法
脆化温度	< -76.0	°C	ASTM D746

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热性能	额定值	单位制	测试方法
热固性			IEC 60811-2-1
200°C ³	30 %		
200°C ⁴	0.0 %		
老化	额定值	单位制	测试方法
Change of Tensile Properties After Aging - 240 h 150°C	< 25 %		IEC 60811-1-2
Retention of Tensile Properties			
-- ⁵	> 70 %		
-- ⁶	> 85 %		
电气性能	额定值	单位制	测试方法
体积电阻率	1.0E+15	ohm·cm	IEC 60093
介电常数 (50 Hz)	< 2.90		IEC 60250
耗散因数 (50 Hz)	< 0.0010		IEC 60250
补充信息	额定值	单位制	
Crosslinking			
700.0 μm ⁷	2.0 day		
700.0 μm ⁸	< 25.0 min		
1.80 mm ⁷	7.0 day		
1.80 mm ⁸	1.00 hr		
挤出	额定值	单位制	
第1气缸区温度	150 °C		
第2气缸区温度	170 °C		
第3气缸区温度	170 °C		
第4气缸区温度	170 °C		
模具温度	170 °C		