AEI SX407:CM424

Crosslinked Polyethylene

AEI Compounds Limited

Message:

Low-smoke, low-toxicity, halogen-free, flame-retardant, silane crosslinkable compound for insulation of LV cables and sheathing of all types of cables
This is a flame-retardant chemically crosslinkable compound, curable by exposure to moist conditions and possessing good extrusion properties. The graft component SX407 is mixed with a crosslinking catalyst masterbatch CM424 generally in the ratio 95:5. The SX407:CM424 system has been specifically developed to meet the requirements of limited toxic/corrosive fume emission.
Core or cable designs made using SX407 have complied with the following flame tests:- BS 4066 Part 1/IEC 332 Part 1; CEGB GDCD Standard 21; VDE 0472 Pt.804 Method C; VDE 0472 Pt.814; NF C 32-070 Test 2 (Category C1); BS 4066 Part 3; IEC 332 Part 3 (Categories A, B & C).
A satisfactory cure can be obtained either by immersion in hot water or exposure to low pressure steam at a temperature up to 65°C.

General Information			
Additive	Flame retardancy		
Features	Low smoke Low toxicity Crosslinkable Halogen-free Flame retardancy		
Uses	Flame Retardant Insulation Flame Retardant Jacketing Low voltage insulation Cable sheath Wire and cable applications		
Agency Ratings	BS 4066 Part 1 BS 4066 Part 3 EC 1907/2006 (REACH) IEC 60332-1 IEC 60332-3 VDE 472-814		
RoHS Compliance	RoHS compliance		
Forms	Particle		
Processing Method	Extrusion		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.37	g/cm³	BS 2782 620A
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress	10.0	MPa	IEC 60811-1-1
Tensile Strain (Break)	150	%	IEC 60811-1-1
Aging	**Nominal Value**	**Unit**	**Test Method**

Change in Tensile Strength (135°C, 168 hr)	20	%	IEC 60811-1-2
Change in Tensile Strain at Break (135°C, 168 hr)	-15	%	IEC 60811-1-2
Thermal	Nominal Value	Unit	Test Method
Deformation (100°C)	15	%	IEC 60811-3-1
Cold bending (-70°C)	pass		IEC 60811-1-4
Thermoset [1]			IEC 60811-2-1
Elongation under load, 20N/cm^2 : 200°C	40	%	IEC 60811-2-1
Permanent elongation after cooling	5.0	%	IEC 60811-2-1
Temperature index	280	°C	ISO 4589-3
Smoke Density	4.1	%	ASTM D2843
Halogen Acid Gas Evolution		%	IEC 60754-1
Head Temperature	150	°C	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity (20°C)	1.0E+13	ohms·cm	IEC 60502
Dielectric Strength (20°C)	14	kV/mm	IEC 60243-1
Relative Permittivity (23°C, 50 Hz)	4.15		IEC 60250
Flammability	Nominal Value	Unit	Test Method
Oxygen Index	29	%	ISO 4589-2
Additional Information	Nominal Value	Unit	Test Method
Crosslinking or cure: A satisfactory cure can be obtained either by immersion in hot water or exposure to low pressure steam at a temperature up to 65°C.			
Extrusion	Nominal Value	Unit	
Cylinder Zone 1 Temp.	130	°C	
Cylinder Zone 2 Temp.	140	°C	
Cylinder Zone 3 Temp.	140	°C	
Die Temperature	150	°C	
Extrusion instructions			
Extruders of L/D ratios (length/diameter) of 15-24 and extruder screws of compression ratio 2:1 or less are recommended.			
NOTE			
1.	Cure assessment by hot set test (forced cured at 80°C in water)		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China


WECHAT