AEI SX-0470:CM424

Low Density Polyethylene

AEI Compounds Limited

Message:

Flexible, silane crosslinkable, polyethylene for low voltage cable insulation
This is a chemically crosslinkable compound for applications where good flexibility or ‘soft touch' performance is required. The graft component SX-0470 is mixed with a crosslinking catalyst masterbatch CM424 or CM493 generally in the ratio 95:5.
The compound is processed in the same way as non-curable TPE compounds, giving good extrusion characterisitcs at normal output rates, with crosslinking off-line when exposed to moist conditions.

General Information			
Features	Crosslinkable Good flexibility		
Uses	Low voltage insulation Wire and cable applications		
Agency Ratings	EC 1907/2006 (REACH)		
RoHS Compliance	RoHS compliance		
Forms	Particle		
Processing Method	Extrusion		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	0.880	g/cm³	BS 2782 620A
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0	g/10 min	Internal method
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A)	75		
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress	9.50	MPa	IEC 60811-1-1
Tensile Strain (Break)	600	%	IEC 60811-1-1
Aging	**Nominal Value**	**Unit**	**Test Method**
Change in Tensile Strength			IEC 60811-1-2
135°C, 168 hr	-10	%	IEC 60811-1-2
180°C, 384 hr	-8.0	%	IEC 60811-1-2
Change in Tensile Strain at Break			IEC 60811-1-2
135°C, 168 hr	-10	%	IEC 60811-1-2
180°C, 384 hr	-8.0	%	IEC 60811-1-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Thermoset [1]			IEC 60811-2-1
Elongation under load, 20N/cm² : 200°C		%	IEC 60811-2-1
Permanent elongation after cooling	5.0	%	IEC 60811-2-1
Head Temperature	190	°C	

Electrical	Nominal Value	Unit	Test Method
Volume Resistivity			IEC 60502
20°C	4.0E+14	ohms·cm	IEC 60502
85°C	3.0E+14	ohms·cm	IEC 60502

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	130	°C
Cylinder Zone 2 Temp.	150	°C
Cylinder Zone 3 Temp.	180	°C
Cylinder Zone 4 Temp.	190	°C
Die Temperature	200	°C

Extrusion instructions
Most modern thermoplastic extruders will process SX-0470:CM493 compound, although screw designed to give good homogenisation without excessive shear is recommended. Both polyethylene and PVC screws have given satisfactory results.

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