AEI SX-0620:CM601

Crosslinked Polyethylene

AEI Compounds Limited

Message:

Oil resistant, flexible, halogen free, flame-retardant, silane crosslinkable insulation and sheathing for cable applications
This is a flame-retardant, silane crosslinkable, flexible polyolefin compound curable by exposure to moist conditions. The graft component SX-0620 is mixed with a crosslinking catalyst masterbatch CM601 generally in the ratio 97:3.
The SX-0620:CM601 compound has been developed to meet the requirements of IEC 92-359 SHF2 and EN50264 EM104 ship wiring and railway standards. The product shows good flexibility and confers tough sheathing protection.
CM601catalyst masterbatch is normally added at 3% addition rate.

General Information			
Additive	Flame retardancy		
Features	Crosslinkable Good flexibility Oil resistance Halogen-free Flame retardancy		
Uses	Flame Retardant Insulation Flame Retardant Jacketing Cable sheath Wire and cable applications		
Agency Ratings	EC 1907/2006 (REACH) EN 50264 IEC 60092-359 SHF2		
RoHS Compliance	RoHS compliance		
Forms	Particle		
Processing Method	Extrusion		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.48	g/cm³	BS 2782 620A
Melt Mass-Flow Rate (MFR) (190°C/21.6 kg)	2.0	g/10 min	Internal method
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress	10.0	MPa	IEC 60811-1-1
Tensile Strain (Break)	170	%	IEC 60811-1-1
Aging	**Nominal Value**	**Unit**	**Test Method**
Change in Tensile Strength			
70°C, 168 hr, in IRM 903 oil	-10	%	
70°C, 168 hr, in water	-20	%	

100°C, 24 hr, in IRM 902 oil	7.7	%	
100°C, 72 hr, in IRM 902 oil	12	%	
100°C, 168 hr, in IRM 902 oil	-6.0	%	
120°C, 168 hr	12	%	IEC 60811-1-2
Change in Tensile Strain at Break			
70°C, 168 hr, in IRM 903 oil	-17	%	
70°C, 168 hr, in water	-20	%	
100°C, 24 hr, in IRM 902 oil	-13	%	
100°C, 72 hr, in IRM 902 oil	2.1	%	
100°C, 168 hr, in IRM 902 oil	-2.8	%	
120°C, 168 hr	-15	%	IEC 60811-1-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Thermoset [1]			IEC 60811-2-1
Elongation under load, 20N/cm^2 : 200°C	60	%	IEC 60811-2-1
Permanent elongation after cooling	5.0	%	IEC 60811-2-1
Halogen Acid Gas Evolution		%	IEC 60754-1
Head Temperature	160	°C	
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 also be obtained either by immersion in hot water or exposure to low pressure steam at a temperature up to 70°C.			
Extrusion	**Nominal Value**	**Unit**	
Cylinder Zone 1 Temp.	100	°C	
Cylinder Zone 2 Temp.	130	°C	
Cylinder Zone 3 Temp.	145	°C	
Cylinder Zone 4 Temp.	155	°C	
Melt Temperature	< 180	°C	
Die Temperature	165	°C	
Extrusion instructions			
Many modern thermoplastic extruders will process the material although a screw designed to give good homogenisation without excessive shear (which could cause unacceptable increases in melt temperature) should be used. An extruder with an L/D ratio (length/diameter) of 15-24 and an extruder screw with a compression ratio 1.2:1 to 2:1 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