

# AEI SX539

Crosslinked Polyethylene  
AEI Compounds Limited

Message:

Silane crosslinkable semi-conducting compound for medium voltage cable screening applications  
This is a silane crosslinkable semi-conducting polyethylene compound to be used in conjunction with silane crosslinkable insulation material for bonded shielding purposes. It is a single component system comprising a silane grafted ethylene polymer known as the graft compound SX539. Crosslinking occurs in the presence of moisture by migration of catalyst from the adjacent core insulation layer.

General Information			
Features	Semi-conductive		
	Crosslinkable		
Uses	Cable sheath		
	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	1.16	g/cm <sup>3</sup>	BS 2782 620A
Gel Content	30	%	ASTM D2765
Thermal deformation (120°C)	60	%	BS 6469 99.1
Head Temperature	180	°C	
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress	13.0	MPa	IEC 60811-1-1
Tensile Strain (Break)	150	%	IEC 60811-1-1
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity			IEC 60502
20°C	< 1.0E+2	ohms·cm	IEC 60502
90°C	< 1.0E+3	ohms·cm	IEC 60502
Additional Information			
Crosslinking or "Cure": The methods and duration of curing will normally be those applicable to the type of insulation material used and the radial thickness of the insulation. Curing temperature is limited to a maximum of 70°C.			
Extrusion	Nominal Value	Unit	
Drying Temperature	40.0 - 50.0	°C	
Drying Time	> 16	hr	
Cylinder Zone 1 Temp.	130	°C	
Cylinder Zone 2 Temp.	170	°C	
Cylinder Zone 3 Temp.	180	°C	

Die Temperature	185	°C
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#### Extrusion instructions

Most modern thermoplastic extruders will process SX539 compound.

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#### 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

