AEI SX703:CM488-6

High Density Polyethylene

AEI Compounds Limited

Message:

Silane crosslinkable, high density polyethylene for injection moulding
SX703 is a silane grafted HDPE compound curable by exposure to moist conditions. It is specifically designed for high output processing by conventional thermoplastic injection moulding. The graft component SX703 is mixed with a crosslinking catalyst masterbatch CM488-6 generally in the ratio 95:5.
This material combines good flow, high rigidity and excellent notched impact strength. The two component system SX703:CM488-6 has high degree of crosslinking which gives it useful strength at temperatures not usually reached by HDPE.

General Information			
Features	Rigidity, high Impact resistance, good Crosslinkable Good liquidity		
Agency Ratings	EC 1907/2006 (REACH)		
RoHS Compliance	RoHS compliance		
Forms	Particle		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	0.955	g/cm³	BS 2782 620A
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	6.0	g/10 min	Internal method
Environmental Stress-Cracking Resistance	20.0	hr	ASTM D1693A
Gel Content	65	%	ASTM D2765
Abrasion Resistance	160	mm³	ISO 4649
Thermoset [1]			IEC 60811-2-1
Elongation under load, 20N/cm² : 200°C	50	%	IEC 60811-2-1
Permanent elongation after cooling	0.0	%	IEC 60811-2-1
Crosslinking - In hot water			
95 to 100°C, 1.00mm	5.0	hr	
95 to 100°C, 2.00mm	12.0	hr	
95 to 100°C, 3.00mm	24.0	hr	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus - 1% Secant	900	MPa	BS 2782 320A
Tensile Stress	26.0	MPa	IEC 60811-1-1
Tensile Strain (Break)	450	%	IEC 60811-1-1
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			ISO 180
-30°C	6.0	kJ/m²	ISO 180
23°C	12	kJ/m²	ISO 180

Injection instructions
By conventional thermoplastic injection moulding using temperatures set in the range 200°C - 250°C. It is essential to minimise moulding stresses, since these may be released during elevated temperature cure or service, causing warpage.

NOTE	
1.	Cure assessment by hot set test (forced cured at 80°C in water)

Recommended distributors for this material

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