# AEI SX739:CM488-6

# High Density Polyethylene

## AEI Compounds Limited

### Message:

Chemically crosslinkable high density polyethylene for injection moulding

The SX739 system 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 equipment. The graft component SX739 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 SX739:CM488-6 has high degree of crosslinking which gives it a 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	0.954	g/cm³	BS 2782 620A
Melt Mass-Flow Rate (MFR) (190°C/2.16			
kg)	4.5	g/10 min	Internal method
Environmental Stress-Cracking Resistance	20.0	hr	ASTM D1693A
Gel Content	62	%	ASTM D2765
Abrasion Resistance	160	mm³	ISO 4649
Thermoset <sup>1</sup>			IEC 60811-2-1
Elongation under load, 20N/cm <sup>2</sup> : 200°C	60	%	IEC 60811-2-1
Permanent elongation after cooling	5.0	%	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 equipment 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)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### 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

