

Solumer™ 8813V

Polyolefin Elastomer

Introduction

Solumer™ 8813V, Polyolefin Elastomer (POE) is an **ethylene-octene copolymer** produced via Nexlene™ technology. It is designed to be used a base polymer of PV encapsulant, which provides excellent electrical properties, high transmittance, and good weathering resistance.

Applications

- Photovoltaic module encapsulant

Properties

		Typical Values	Unit	Test Method
Physical Properties	Density	0.873	g/cm ³	ASTM D792
	Melt index (2.16 kg @190°C)	13	g/10min	ASTM D1238
	Mooney viscosity (ML1+4 @ 121°C)	3	MU	ASTM D1646
Mechanical Properties¹	Tensile strength at break	>70	kgf/cm ²	ASTM D638 ²
	Elongation at break	>800	%	ASTM D638 ²
	Tensile modulus (100% Elongation)	24	kgf/cm ²	ASTM D638 ²
	Flexural modulus (1% secant)	80	kgf/cm ²	ASTM D790
	Tear strength (Type C)	28	kgf/cm ²	ASTM D624
	Hardness			
	Shore A (5 sec)	73		ASTM D2240
	Shore D (5 sec)	19		ASTM D2240
Thermal Properties	Melting temperature	64	°C	SK Method
	Glass transition temperature	-58	°C	SK Method
Electrical Properties	Volume resistivity	>1.0E+16	Ω.cm	SK Method

¹ Evaluated using compression molded sample, process condition: 170 °C, 4 min

² Crosshead speed: 500 mm/min.

Notes

These are *typical values* and are *not to be construed as specifications*. The physical properties are highly dependent on the manufacturing conditions. So customers should confirm performances by their own tests.

For additional sales, order and technical assistance

Head office SK geo centric Co.,LTD
51 Jong-ro, Jongno-gu,
Seoul, Republic of Korea
TEL +82-2-2121-7067

TS&D SK innovation Institute of Environmental Science & Technology,
325 Exporeo,Yueseong-gu,
Daejeon, Republic of Korea
TEL +82-42-609-8871