

Technical Information

Solumer™ 4861

Polyolefin Elastomer

Introduction

Solumer™ 4861, Polyolefin Elastomer (POE), is an **ethylene-butene copolymer** produced via Nexlene™ technology that performs well in wide range of general purpose of thermoplastic elastomer applications. It has excellent flow characteristics and provides superior impact resistance.

Applications

- General Purpose thermoplastic elastomers
- Impact modification
- Footwear

Properties

		Typical Values	Unit	Test Method	
Physical Properties	Density	0.862	g/cm ³	ASTM D792	
	Melt index (2.16 kg @190°C)	1.2	g/10min	ASTM D1238	
	Mooney viscosity (ML1+4 @ 121°C)	19	MU	ASTM D1646	
Mechanical Properties¹	Tensile strength at break	20	kgf/cm ²	ASTM D638 ²	
	Elongation at break	>600	%	ASTM D638 ²	
	Tensile modulus (100% Elongation)	14	kgf/cm ²	ASTM D638 ²	
	Flexural modulus (1% secant)	60	kgf/cm ²	ASTM D790	
	Tear strength (Type C)	20	kgf/cm ²	ASTM D624	
	Hardness	Shore A (1 sec)	54		Hardness
		Shore D (1 sec)	12		ASTM D2240
Thermal Properties	Melting temperature	34	°C	SK Method	
	Glass transition temperature	-58	°C	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

TS&D