

SANTOPRENE® 123-40 ECO-R (PRELIMINARY)

A developmental hard, black thermoplastic vulcanizate (TPV) grade in the thermoplastic elastomer (TPE) family made using up to 50% post-consumer recycled (PCR) materials. It is a general-purpose product well suiting needs of many molding, extrusion, coextrusion applications. It is polyolefin based and recyclable within the manufacturing stream.

Typical mechanical properties

Stress at 100% elongation	1330 psi	ISO 527-1/-2 or ISO 37
Stress at break	1330 psi	ISO 527-1/-2 or ISO 37
Elongation at break	403 %	ISO 527-1/-2 or ISO 37
Shore D hardness, 15s	41	ISO 48-4 / ISO 868
Compression set at 70°C, 24h	50 %	ISO 815
Compression Set, 125°C, 70h	75 %	ISO 815

Other properties

Density	493 lb/gal	ISO 1183
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Injection

Drying Temperature	180 °F	
Drying Time, Dehumidified Dryer	4 h	
Processing Moisture Content	0.08 %	
Max. regrind level	20 %	
Melt Temperature Optimum	401 °F	Internal
Max. mould temperature	50 - 126 °F	
Vent depth	1 mil	
Back pressure	50 - 99.9 psi	
Injection speed	fast	

Extrusion

Drying Temperature	180 °F
Drying Time, Dehumidified Dryer	4 h
Melt Temperature Range	356 - 428 °F

Characteristics

Additives	Contains Recycle
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Processing Texts

Processing Notes	Desiccant drying for 3 hours at 80°C (180°F) is recommended. Santoprene® TPV has a wide temperature processing window from 175 to 230°C (350 to 450°F) and is incompatible with acetal and PVC.
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