



EZPrene 9087A

Product Description:

87 Shore A TPE (Thermoplastic Vulcanizate). Available in black, natural or pre-colored for injection molding and extrusion applications. This material is non-hygroscopic and offers excellent chemical resistance and physical properties. EZPrene is polyolefin based and is 100% recyclable.

Properties	Value	Unit	Standard
Physical			
Hardness - Injection Molded, 5 sec	88	Shore A	ASTM D2240
Hardness - Extruded, 5 sec	86	Shore A	ASTM D2240
Density	0.94	g/cm3	ASTM D792
Mechanical			
Tensile Strength at Break	1,479 (10.2)	psi (MPa)	ASTM D412
Elongation at Break	470	%	ASTM D412
100% Modulus	957 (6.6)	psi (MPa)	ASTM D412
Tear Strength	49.0	(kN/m)	ASTM D624
Compression Set			
22h / 23 °C	44	%	ASTM D395B
70h / 125 ∘C	63	%	ASTM D395B
Service Temperatures			
Brittleness Point	-50	°C	ASTM D746
Dynamic Service Temperature	130	°C	
Environmental			
Ozone Resistance	Excellent		ASTM D-1149

Features

Overmolded and Co-extrusion adhesion to Polypropylene Excellent Adhesion to Polypropylene and SEBS Easy to Color Recyclability
Non Hygroscopic

Environmental Resistance

Ozone – excellent UV – Excellent Water – Excellent (Non Hygroscopic)

Low Die Swell





Processing Parameters

Drying Conditions

It is not necessary to pre-dry this material but in the event of moisture accumulation or evidence of splay, the material can be dried for 2-3 hours at 180°F (82°C).

Injection Molding Conditions

Temperatures:

Rear: $375 - 400^{\circ}F$ (191 - 204°C) Middle: $385 - 410^{\circ}F$ (196 - 210°C) Front: $385 - 410^{\circ}F$ (196 - 210°C) Nozzle: $410 - 430^{\circ}F$ (210 - 221°C)

Melt Temperature $390 - 430^{\circ} F (200 - 220^{\circ} C)$ Mold Temperature: $75 - 125^{\circ} F (24 - 52^{\circ} C)$

Injection Pressure: 750 – 1300psi

Injection Speed: Fast (0.5 – 2.0 Seconds)

Screw Speed: 50 – 200 rpm Hold Times: 5-7 seconds Cushion: 0.2 - 0.5 inch Cooling Times: 30 – 50sec

Clamp Tonnage: 2.0 to 3.5 tons/in²

Extrusion Conditions

Screw: L/D 24:1 minimum

Temperatures:

Feed Throat: $330-350^{\circ}F$ ($166 - 180^{\circ}C$) Feed Zone: $340 - 375^{\circ}F$ ($170 - 190^{\circ}C$)

Compression Zone: $355 - 390^{\circ}F$ ($180 - 200^{\circ}C$) Metering Zone: $375 - 410^{\circ}F$ ($190 - 210^{\circ}C$) Die/Adapter: $375 - 410^{\circ}F$ ($190 - 210^{\circ}C$) Melt Temperature: $375 - 390^{\circ}F$ ($190 - 200^{\circ}C$)

Screw Speed: 30 -80 rpm Screen Pack: 20/40/60

†The data listed here fall within the normal range of product properties, but they should not be used to establish specification limits or used alone as a basis for design. This information is not intended as a warranty of any kind. Buyers must make their own representative test and assume all risks of use, whether used alone or in combination with other products. Ravago Manufacturing Americas, LLC assumes no obligation or liability of any advice furnished by it or results obtained with respect to these products. All warranties expressed or implied including warranties of merchantability for a particular purpose or use are excluded and disclaimed. Ravago Manufacturing Americas, LLC assumes no liability for use of products in infringement of any patent. The foregoing limitation of remedy and exclusion of liability is reflected in and is part of the consideration for the price, at which the products are sold by Ravago Manufacturing Americas, LLC. All data displayed herein has been obtained via testing of injected molded specimens of natural color. Pigmentation may affect certain properties to various degrees. *This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

‡ Shrinkage data are general guidelines and are only intended to allow comparison to other materials. They should not be used as the sole source of information for generating core and cavity mold dimensions.