T-BLEND®9004N-DV is a pre-formulated and pelletized general-purpose thermoplastic elastomer compound based on TPV Raw material.

It is designed for the extrusion products of soft-touch elastomer components; this material exhibits excellent flow properties and offers molded articles with fine texture, dry surface and excellent rubbery feeling. And it gets the matt surface similar to the Santoprene product.

Being a thermoplastic elastomer, T-BLEND®9004N-DV can be easily processed with general processing equipment and tools designed for thermoplastics and yet possess elastomeric properties at ambient temperatures.

Properties

Characteristics	Methods	Typical values
Product Form	NA	Pellets
Colour	NA	Natural
Specific Gravity	ASTM D 792	1.06
Hardness (Injection Test Piece)	ASTM D 2240	90 ±3
Tensile Strength at Break (kg/cm2)	ASTM D 412	150
Elongation at Break (%)	ASTM D 412	720
300% Modulus (kg/cm2)	ASTM D 412	90
Melt Flow Index 5 kg @ 180ºC	ASTM D 1238	10
Tear strength (kg/cm)	ASTM D 624	125
Rebound (%)	ASTM D1054	41
Akron (c.c)	B.S 903	0.09

Ps.Data shown are average values and should not be examined for specifications.

Processing Guide

T-BLEND®9004N-DV rubber is a versatile material and can be processed by using high shear rate injection molding methods. Stability of T-BLEND®9004N-DV is excellent at normal processing temperature. However should inadvertent loss of temperature control lead to decomposition the degradation products are non-corrosive. Generally, it reacts the same as other easy molding thermoplastics, such as polystyrenes. The finished parts have sharp and well defined details.

Typical starting conditions for a extruding machine are listed in the accompanying chart.

These values are intended only as guidelines, and the optimum conditions will vary from machine to machine.

Typical mold shrinkage for T-BLEND®9004N-DV is between 0.010-0.020 inch/inch. Short cycle time can be achieved and the scrap is 20% recyclable without loss in properties.

LDPE or EVA colour concentrates can be used to colour T-BLEND®9004N-DV.

Suggested Processing Conditions - - - Extrusion	
Barrel temperature	
Feed	80ºC
Rear	170~180ºC
Front	180~190ºC
Nozzle	190~210ºC
Mold temperature	30 - 40ºC
Back pressure	50 - 100 psi
Injection rate	Moderate
Cycle time	25 - 50 sec

(1kg/cm2 = 14.223 psi)

Precaution in handling and storing

T-BLEND®9004N-DV rubber pellets present no unusual handling problems, thus normal procedures for handling solids that might form a dust should be followed.