

T-BLEND® 5702N-SP is a pre-formulated and pelletized general-purpose thermoplastic elastomer compound based on styrene butadiene block copolymer.

This material exhibits excellent flow properties and offers dry surface and excellent rubbery feeling.

Being a thermoplastic elastomer, T-BLEND® 5702N-SP 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	0.92
Hardness (Injection Test Piece, Shore A)	ASTM D 2240	57
Tensile Strength at Break (kg/cm ²)	ASTM D 412	34
Elongation at Break (%)	ASTM D 412	400
300% Modulus (kg/cm ²)	ASTM D 412	30
Tear strength (kg/cm)	ASTM D 624	31
Melt Flow Index 5 kg @ 180°C	ASTM D 1238	135
Rebound (%)	ASTM D 1054	56

Processing Guide

T-BLEND®5702N-SP rubber is a versatile material and can be processed by using high shear rate injection molding methods. Stability of T-BLEND®5702N-SP is excellent at normal processing temperatures. 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 reciprocating screw injection molding 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®5702N-SP is between 0.015-0.025 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®5702N-SP.

Suggested Processing Conditions	
Barrel temperature	
Feed	100~120°C
Rear	140~150°C
Front	150~160°C
Nozzle	160~170°C
Mold temperature	30 - 40°C
Back pressure	3.5 - 7 kg/cm ²
Injection rate	Moderate
Cycle time	25 - 50 sec

(1kg/cm² = 14.223 psi)

Precaution in handling and storing

T-BLEND®5702N-SP rubber pellets present no unusual handling problems, thus normal procedures for handling solids that might form a dust should be followed.