T-BLEND®0012N-NE is a pre-formulated and pelletized thermoplastic elastomer compound based on styrenic block copolymer.

It is designed for the injection molding of non-toxic toy components and insole product parts. It has the smooth surface and the clear appearance. It is very suitable to apply in manufacturing soft product and get the comfortable touch feeling.

Being a thermoplastic elastomer, T-BLEND®0012N-NE 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	Transparent
Specific Gravity	ASTM D 792	0.88
Hardness (Injection Test Piece, OO Type)	ASTM D 2240	30
Tensile Strength at Break (kg/cm2)	ASTM D 412	40
Elongation at Break (%)	ASTM D 412	＞1000
300% Modulus (kg/cm2)	ASTM D 412	-
Tear Strength at Break (kg/cm)	ASTM D 624	17
Melt Flow Index (g/10min)(2.16KG@160℃)	ASTM D 1238	4

Processing Guide

T-BLEND®0012N-NE theroplastic elastomer is a versatile material and can be processed by using injection molding methods.

Stability of T-BLEND®0012N-NE 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®0012N-NE is between 0.020-0.030 inch/inch. And the scrap is 20% recyclable without loss in properties.

The pigment can be used to colour T-BLEND®0011N-NE. And dyestuff cannot apply in TPR product.

Suggested Processing Conditions	
Barrel temperature	
Feed	75℃
Rear	160~180℃
Front	180~200℃
Nozzle	200~230℃
Mold temperature	30-40℃
Back pressure	low
Injection rate	Moderate
Cycle time	60 – 80 sec

(1kg/cm2 = 14.223 psi)

Precaution in handling and storing

T-BLEND®0012N-NE rubber pellets present no unusual handling problems, thus normal procedures for handling solids that might form a dust should be followed .

Under proper storage and handling the uncontaminated material should not cause any irritation to human skin and eyes. It should not generate or decompose into hazardous substances when processed of within recommended temperature range.

It is our advice that fabricators using this compound should conduct their own tests to confirm product suitability in meeting requirements for food-contact or mouth-contact applications.