

T-BLEND® 2003-10S is a pre-formulated and pelletized thermoplastic elastomer compound based on styrene butadiene block copolymer. Thanks to its high strength and clarity. It is designed for the injection molding of non-toxic toy components and infant product parts with improved tear and torque resistance.

Being a thermoplastic elastomer, **T-BLEND® 2003-10S** can be easily processed with general processing equipment and tools designed for thermoplastics and yet possess elastomeric properties at ambient temperatures.

Physical Properties:

PROPERTIES	TESTING METHOD	CONDITIONS	UNITS	VALUES
Form	N/A	--	--	Pellets
Color	N/A	--	--	Dark blue
SP.GR/Density	ASTM D792	--	--	0.84~0.90
Hardness	ASTM D2240	Type OO	Shore OO	52~58
Melt Flow Index	ASTM D1238	2.16 kg @ 160°C	g/10min	35~85
Tensile strength at break	ASTM D412	Type 3, specimen	kg/cm ²	16 Typical
300% Modulus	ASTM D412	500 mm/min	kg/cm ²	3 Typical
Tear strength	ASTM D624	C Die	kg/cm	4 Typical

Processing Guide :

T-BLEND® 2003-10S rubber is a versatile material and can be processed by using high shear rate injection molding methods.

T-BLEND® 2003-10S 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.

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Typical mold shrinkage for **T-BLEND® 2003-10S** is between 0.008-0.015 inch/inch. Short cycle time can be achieved and the scrap is 20% recyclable without loss in properties.

PS or EVA color concentrates can be used to color **T-BLEND® 2003-10S**.

Items		Values
Barrel Temp. (°C)	Feed	130
	Rear	140
	Front	150
	Die	160
Molding temperature (°C)		30 ~ 40
Back Pressure (kg/cm ²)		3.5 ~ 50
Injection Speed		Moderate
Cycle (sec)		35 ~ 50

(1 kg/cm² = 14.223 psi)

Precaution in handling and storing :

T-BLEND® 2003-10S rubber pellets present no unusual handling problems, thus normal procedures for handling solids that might form a dust should be followed.

