

T-BLEND[®]6800N-AB is a pre-formulated and pelletized general-purpose thermoplastic elastomer compound based on styrene butadiene block copolymer.

It is designed for the over-molding of soft-touch elastomer components onto hard thermoplastics such as ABS, PC. This material exhibits excellent flow properties and offers molded articles with fine texture, dry surface and excellent rubbery feeling.

Being a thermoplastic elastomer, T-BLEND[®]6800N-AB 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 | 1.05 |
| Hardness (Injection Test Piece, Shore A) | ASTM D 2240 | 70 |
| Tensile Strength at Break (kg/cm ²) | ASTM D 412 | 109 |
| Elongation at Break (%) | ASTM D 412 | 530 |
| Modulus at 300% (kg/cm ²) | ASTM D 412 | 62 |
| Tear strength (kg/cm) | ASTM D 624 | 63 |
| Melt Flow Index 5 kg @ 180°C | ASTM D 1238 | 5 |
| Rebound (%) | ASTM D 1054 | 56.8 |
| Akron (c.c / 2lb * 2200rev) | B.S 903 | 0.36 |

Processing Guide

T-BLEND[®]6800N-AB rubber is a versatile material and can be processed by using high shear rate injection molding methods. Stability of T-BLEND[®]6800N-AB 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[®]6800N-AB is between 0.015-0.025 inch/inch. Short cycle time can be achieved and the scrap is 100% recyclable without loss in properties. Before using, T-BLEND[®]6800N-AB should be dried to increase bonding strength and avoid decomposed.

LDPE or EVA colour concentrates can be used to colour T-BLEND[®]6800N-AB.

| Suggested Processing Conditions | |
|---------------------------------|----------------------------|
| Dry condition | 80-90°C / 2hrs |
| Barrel temperature | |
| Feed | 80°C |
| Rear | 170°C |
| Front | 180°C |
| Nozzle | 190°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[®]6800N-AB rubber pellets present no unusual handling problems, thus normal procedures for handling solids that might form a dust should be followed.