# Sutper®TPE X1010002

## Product Description

This product is a type of thermoplastic elastomer (TPE), specifically designed for high-rebound, soft shoe materials. It features excellent physical and mechanical properties, superior chemical resistance, and elasticity, making it ideal for use in the composite footwear industry.

## Specifications

| | |
|---|---|
| Applications | •The ultra-light TPE shoe material, reduce costs |
| Environmental | •RoHS compliant |
| Appearance | •Translucent |
| Form | •Granules |
| Molding method | •Injection molding |
| Availability | •Europe<br>•North America<br>•Asia<br>•Africa & Middle East |

| Physical Properties | Typical Value | Unit | Test Method |
|---|---|---|---|
| Density | 0.9 | g/cm$^3$ | ASTM D792 |
| Melt Flow Index (190℃*5kg) | 10 | g/10min | ASTM D1238 |

| Hardness | Typical Value | Unit | Test Method |
|---|---|---|---|
| Shore A,10sec,23℃ | 85 | A | ASTM D2240 |

| Mechanical Properties | Typical Value | Unit | Test Method |
|---|---|---|---|
| 100% Tensile Strength - vertical flow (23°C) | 3.9 | Mpa | ASTM D412 |
| Tensile Strength - Vertical Flow (23°C) | 22.8 | Mpa | ASTM D412 |
| Break Elongation-Vertical Flow23℃ | 784 | % | ASTM D412 |
| Tear Strength -Vertical Flow 23℃ Die C | 64 | KN/m | ASTM D624 |

## Additional Information

1. The above test data were obtained using fan gate injection molded specimens with dimensions of 110 mm × 80 mm × 2 mm. The tensile strength, elongation at break, and stress at a given elongation were tested perpendicular to the flow direction, while tear strength was tested along the flow direction.
2. The compression rate for compression set is 25%.
3. The properties listed are typical and should not be considered technical specifications or part of an agreement.
4. The user should be aware that Sutper needs to confirm all final details before taking any action based on the information and recommendations in this document.