# Sampo MAX HPU 95 Shore A natural

TPU — Sampo GmbH

## Product Texts

Sampo MAX is a polycarbonate-based thermoplastic polyurethane.
Sampo MAX is characterised by the following features:
• Very good tensile strength, elongation at break and tear resistance
• Wide range of application temperature from -20°C to 115°C
• Low gas permeability
• Excellent hydrolysis and chemical resistance
• Suitable for turning, milling and grinding operations with very low tool wear

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Compression set at 70 °C, 24h | **27** | % | ISO 815 |
| Compression set at 100 °C, 24h | **33** | % | ISO 815 |
| Tear strength | **110** | kN/m | ISO 34-1 |
| Abrasion resistance | **32** | mm³ | ISO 4649 |
| Shore A hardness | **95** | - | ISO 7619-1 |
| Shore D hardness | **48** | - | ISO 7619-1 |
| **Other Standards[S]** | | | |
| Tensile Strength | **50** | MPa | DIN 53504 |
| Strain at break | **350** | % | DIN 53504 |
| Stress at 100% elongation | **15** | MPa | DIN 53504 |
| Stress at 300% elongation | **84** | MPa | DIN 53504 |

S: These properties are reported by the producer according standards that are different to our defaults.

| Other properties | Value | Unit | Test Standard |
|---|---|---|---|
| Density | **1200** | kg/m³ | ISO 1183 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---|---|---|
| Pre-drying - Temperature | **80** | °C | - |
| Pre-drying - Time | **3** | h | - |
| Processing humidity | **≤0.03** | % | - |
| Melt temperature | **225 - 235** | °C | - |
| Mold temperature | **20 - 60** | °C | - |
| Feed temperature | **25 - 40** | °C | - |
| Zone 1 | **185 - 195** | °C | - |
| Zone 2 | **210 - 220** | °C | - |
| Zone 3 | **215 - 225** | °C | - |
| Nozzle temperature | **225 - 235** | °C | - |

## Characteristics

**Processing**
Injection Molding

**Delivery form**
Pellets, White

**Features**
Acoustical Barrier Properties

**Chemical Resistance**
General Chemical Resistance, Hydrolytically Stable

**Certifications**
Food contact, Food approval FDA 21 CFR

**Regional Availability**
Europe