

MEXPUR TPU S55A02 is a polyester based, plasticized and fully transparent TPU, exhibiting fast processing cycles. Recommended for the production of high flexibility soles, slip properties and very good abrasion resistance exhibits an excellent adhesion to most of two component PU systems. This product combines the advantages of rubbery material to those typical ones of TPU.

Property	Value	Unit	Method	Method	Propiedad
Specific Gravity	1.18	gr/cm <sup>3</sup>	ASTM D792	DIN 53479	Densidad
Shore Hardness	53	A	ASTM D5963	DIN 53505	Dureza Shore
Abrasion Loss	52	mm <sup>3</sup>	ASTM D2241	DIN 53516	Abrasión
Tensile Modulus: 50%	-	MPa	ASTM D412	DIN 53504	Módulo de Young: 50 %
Tensile Modulus: 100%	2	MPa	ASTM D412	DIN 53504	Módulo de Young: 100 %
Tensile Modulus: 300%	4.8	MPa	ASTM D412	DIN 53504	Módulo de Young: 300 %
Tensile Strength	19	MPa	ASTM D412	DIN 53504	Resistencia a la tracción
Elongation at Break	960	%	ASTM D412	DIN 53515	Alargamiento a la rotura
Tear Strength	60	kN/m	ASTM D624	DIN 53505	Resistencia al desgarro
VICAT Softening Point	-	°C	ASTM D1525	ISO 306	VICAT
Compression Set: 70h/23°C	24	%	ASTM D395	DIN 53517	Compression Set: 70h/23°C
Compression Set: 22h/70°C	41	%	ASTM D395	DIN 53517	Compression Set: 22h/70°C

All these physical properties are based on injection molded samples, which are conditioned at 23°C/50% for 24h. Above value s are typical values and should not be used as specifications.

**Processing methods:** Injection, extrusion, calendaring, T-die extrusion

Complying with FDA (21CFR 177.1680, 177.2600), RoHS, REACH, etc.

**Identifiers:** Chemical Name: MDI/ butylene glycol/ adipic acid copolymer

**Synonyms:** Polyester-based TPU

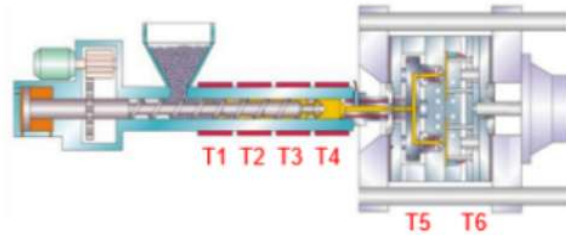
**CAS #** 26375-23-5

Applicaions	Value Propositions	Market Segments
Elastic bands	Short cycle time	Plastics
Automotive Parts	Good wear resistance	Wire & cable
Compounding	Excellent Mechanical Properties	Footwear
Footwear	Outstanding abrasion resistance	Films & Sheets
Seals		Transportation
Conveyor belts		Automotive
Screen packs		
Oil tubes		

**PREDRYNG CONDITONS** Material to be need dried prior processing at 80÷90°C, preferably using a dehumidifying drier feeded by air exhibiting a dew point lower than -30°C,

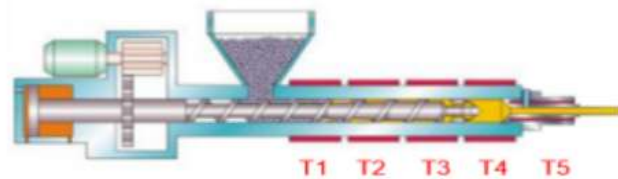
**INJECTION GUIDELINES**

**Molding shrinkage:** 1.5 ÷ 2.5%  
**Injection Speed:** Medium - Fast  
**Injection Pressure:** Medium - Fast  
**Back Pressure:** Low-Medium  
**Holding Pressure:** Sufficient to pack the mould  
**Cooling:** Can be demoulded when parts have sufficiently cooled  
**Barrel temperature °C:** T1: 120÷130 T2: 170÷180 T3: 170÷180 T4: 170÷175 T5/T6: 25 ÷ 45



**EXTRUSION GUIDELINES**

**L/D Ration:** 20:1 - 25:1  
**Compression Ratio:** 2.5 - 3.0  
**Breaker Plate/Screen:** Both should be used  
**Draw Down:** 5 - 10%  
**Cooling:** Cold water bath  
**Barrel temperature °C:** T1: 110÷120 T2: 140÷150 T3: 170÷180 T4: 170÷185 T5: 150 ÷ 160  
Feed Compression Metering Connector Die



**STORAGE AND STABILITY**

MEXPUR TPU S55A02 is supplied in regular pelletized form and packaged in 25 kg bags on pallet 1000 Kg. MEXPUR TPU S55A02 must be stored in its original and sealed containers and kept in a dry and well ventilated place, avoiding the direct sun radiation.

**SHELF LIFE**

The shelf life of MEXPUR TPU S55A02 is of six months from the date of delivery to the final customer, if stored in its original sealed packaging and in proper conditions.

**SAFETY**

The product is not considered dangerous, nevertheless we recommend to read the Material Safety Data Sheet before handling.

The indicators / data / suggestions provided in this report are the company's control, small-scale test, pilot test or experience data for reference only. The buyer is responsible for testing the product to verify the buyer's proposed process, application field and special environment. The seller cannot control the process and production environment of subsequent processing products, so the buyer shall be responsible for the risks and hidden dangers arising from subsequent processing.