BARLOG Plastics
Mehr aus Polymer.

Technical data
KEBAFLEX / U A 85 ST C01

KEBAFLEX / U A 85 ST C01 is a TPU with a Shore hardness of A 85. It is characterized by its excellent flowability and is also suitable for thin-walled components.KEBAFLEX / U A 85 ST C01 has very good hydrolysis resistance, is flexible at low temperatures and resistant to microorganisms.

Polymer: TPE-U

ISO designation: TPE-U

Productgroup: TPE

Brief description of the product family:

The trade name KEBAFLEX / U stands for a range of thermoplastic polyurethane elastomers. KEBAFLEX / U is characterized by excellent sliding and wear behavior, suitability for use at elevated temperatures, good UV resistance and high mechanical load-bearing capacity.

Properties:

flexible, good gliding properties, good recovery behavior, High wear resistance, hydrolysis stable, impact resistant, PFAS-free

Typical areas of application:

Sealing elements, Spring elements, Sliding elements, Haptic components, industrial goods, shockproof housing, Gears, Timing belt

Industries:

Automotive, Household appliances, Industry, Agriculture, Mechanical Engineering, Sports & Recreation

Physical properties

Density in kg/m³ | ISO 1183-1	1110

Mechanical properties

Stress at break in MPa | ISO 527-1	45
Strain at break in % | ISO 527-1	580
Notched impact strength (Charpy) at 23°C in kJ/m² | ISO 179-1eA	N.B.
Notched impact strength (Charpy) at -30°C in kJ/m² | ISO 179-1eA	N.B.
Compression set at 23°C in %. | ISO 815-1	25
Shore A hardness | DIN ISO 7619-1	85
Stress at 10% elongation in MPa | DIN EN ISO 527-1	2.2
Stress at 50% elongation in MPa | DIN EN ISO 527-1	5.0
Stress at 100% elongation in MPa | DIN EN ISO 527-1	5.9
Stress at 300% elongation in MPa | DIN EN ISO 527-1	11.0

Thermal properties

Melting temperature (DSC, 10°C/min) in °C | ISO 11357-1/-3	160

Thermal properties

Burning behavior at thickness 0.4 mm | IEC 60695-11-10	HB

Processing instructions:

Pre-drying recommendation:

Dryer type: dry air dryer
Temperature: 90°C
Drying time: 3 – 4 h
Residual moisture: < 0.02

Temperature recommendations:

Melt temperature: 210 – 230°C
Mold temperature: 20 – 40°C

Due to its special properties, KEBAFLEX / U may tend to stick to smooth and polished mold surfaces. Structured surfaces favor the demolding behavior. Alternatively, the mold can be provided with suitable coatings. Please consult our application engineering department.

Dwell time on the machine:

Aim for short dwell time, empty cylinder when production is interrupted, lower temperature, flush with fresh material when restarting.

Post-treatment:

To achieve optimum service properties, tempering of the finished parts is required. This heat treatment can be carried out in a forced-air furnace.

Tempering recommendation:

Temperature: 100°C
Tempering time: 20 h

Legal notices:

The information in this data sheet is based on our current knowledge and experience. Due to the wide range of possible influences during processing and application of our products, they do not exempt the processor from carrying out his own tests and trials. A legally binding assurance of certain properties or suitability for a specific application cannot be derived from our information.

* FE products are development products which are still in the trial phase. Technical data may still change in the course of product and process development. No final decision has yet been made on the commercialization of FE products. We reserve the right to discontinue the manufacture of FE products without giving further reasons.

Created at: 22.05.2026

Am Weidenbach 8-10
51491 Overath

Telefon +49 (0)2206 90851-100
Telefax +49 (0)2206 90851-199

E-Mail: kontakt@barlog.de
Web: www.barlog.de