

Excite to win!

ULTRA LIGHTNESS TO GO.



 **BASF**

We create chemistry



Elastollan® Light

for performance and design



Elastollan® Light is a thermoplastic polyurethane mixed with blowing agent masterbatch which is used to manufacture particularly light-weight, high grade soles on a cost-efficient basis by injection-molding. Elastollan® Light is used in outsoles, midsoles or elements in sport shoes.

The TPU system essentially comprises up to five mutually coordinated com-

ponents in granule form: basic TPU, chemical and physical blowing agent masterbatch, color masterbatch suitable for expanded TPU and abrasion additive.

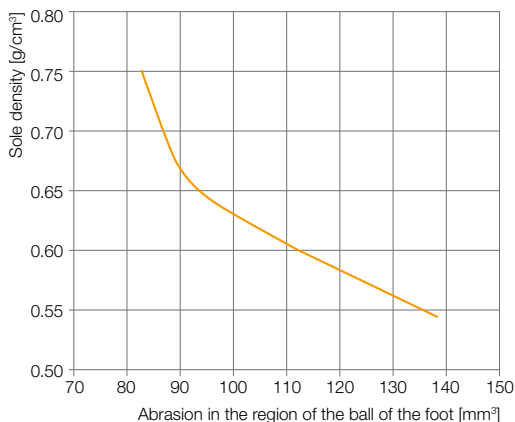
The up to five components can be mixed, dried and fed to the injection-molding unit fully automatically in a customary simple manner. The used blowing agent consists of a masterbatch in form of

granules. Therefore the dust encountered with conventional TPU blowing agent systems can be avoided right from the start. The precise coordination of these components guarantees processing with stability and an absence of voids over a broad processing window.

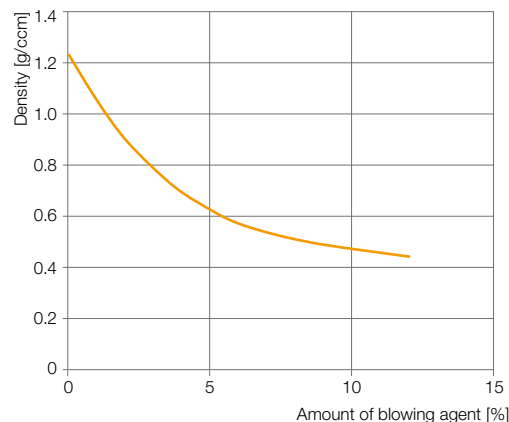
Properties of Elastollan® Light

- Density range 0.4 - 0.9 g/L, depending on amount of blowing agent
- High wear and hydrolysis resistance
- Improved thermal insulation
- Unrestricted colorability
- Straight forward processing by injection-molding

Abrasion behavior



Density in dependence of amount of blowing agent



Properties of basic Elastollan® grades

| Grade | NEW | | |
|--|---------------|------------------|---------------|
| | soft 35 A 12P | BCF 55 A 12 PTSG | 560 A 13 PTSG |
| Hardness [Shore A] DIN ISO 7619-1 (3s) | 37 | 55 | 60 |
| Density [g/cm³] DIN EN ISO 1183-1-A | 1.18 | 1.18 | 1.22 |
| Tensile strength [MPa] DIN 53504-S2 | 12 | 18 | 24 |
| Elongation at break [%] DIN 53504-S2 | 1,150 | 1,250 | 850 |
| Tear strength [N/mm] DIN ISO 34-1Bb | 27 | 35 | 50 |

The plaques are manufactured by injection molding from pre-dried granules (water content less 0.02 %). Test plaques are aged 20 hrs at 100 °C. Specimens are cut from test plaques. Test conditions: 23 °C ± 2 °C and 50 % ± 6 % rel. humidity.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. (October 2019)