

Tough and light:  
Elastopan<sup>®</sup> Proflite

**BASF has developed an easy to use polyurethane system for making lightweight midsoles for safety shoes with excellent antistatic properties but also flexible, soft and highly resistant to chemicals.**

The EN 344 outlines standard requirements and methods of testing safety shoes and protective footwear as well as work shoes for professional use.

In particular, safety shoes are intended to protect people's feet from such hazards as being squashed, burns

Elastopan Proflite is a polyurethane system developed for the manufacture of lightweight midsoles for safety shoes that responds to customers' growing demands for comfort, design content and high productivity. Based on a special formulation, this easy-to-use product offers outstanding advantages in terms of production and technical characteristics:

- density of sole from 0,36 to 0,42
- excellent flowing properties so that the sole can be moulded with complex designs
- high hydrolysis resistance
- good bonding performance to TPU/PU/Rubber
- unique reaction profile: long cream time, short demoulding time

- good processability and mould filling
- suitable for antistatic and ESD<sup>(1)</sup> shoes.

Furthermore, thanks to special components for PU, the IMR

Technology (Internal Mould Release) reduces the need for external release agents by 60%.

must ensure the wearer protection from such risks as surfaces covered in oily, greasy or hot substances. For these reasons the choice of materials for manufacturing soles for safety footwear is obviously of prime importance. Polyurethane is known for being lightweight, flexible, highly resistant to chemicals, with good slip resistance and antistatic properties.

Elastopan Proflite is an innovative high-quality, low density material that guarantees maximum security as well as comfort for the wearer.

(1) ElectroStatic Discharge

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# Elastopan<sup>®</sup> Proflite

**PU System for maximum safety shoe soles**

from sparks and hot liquids, from cold, perforations and vibrations, through the use of one or more technological devices such as steel tips and/or metal plates to guard against rupture. Furthermore, safety shoes

## Elastopan Proflite compared to standard system

| Midsole         | Moulding Density g/cm <sup>3</sup> | Cream Time s | Demoulding Time s | Hardness DIN 53505 ShA | Antistatic DIN EN 61340 M Ohm  |
|-----------------|------------------------------------|--------------|-------------------|------------------------|--------------------------------|
| Standard system | 0.45 to 0.50                       | 5 to 6       | 180               | 40 to 60               | 0.1 to 1000                    |
| Proflite system | 0.36 to 0.42                       | 7 to 9       | 120               | 40 to 60               | 0.1 to 1000<br>ESD: 0,75 to 35 |

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