



# TRANSIL 45

## DATASHEET

**Supplied by Mouldlife**

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**Description**

Transil 45 A / B is a two component silicone elastomer that crosslinks at room temperature by polyaddition reaction. The polymerisation can be accelerated by heat (max. 150 °C).

The silicone components are delivered as two component low viscous liquids, which once mixed and cured, transforms into a transparent, elastic and resistant material. Polymerisation occurs without formation of heat.

**Advantages**

- High 40 shore hardness with exceptional mechanical properties.
- Fast mixing (1 : 10) and easy processing due to the low viscosity
- 5% catalyst addition yields 28 SHORE A hardness
- Outstanding transparency
- Accurate reproduction of details

**Applications**

Transil 45 A / B is a fluid moulding silicone designed for casting polyurethane, epoxy and polyester resins as well as wax and polyurethane foams.

Due to the clear nature of this product, it is excellent for rapid prototyping where the rubber is cut into two pieces.

**Characteristics 1. Components**

<b>Properties</b>	<b>Transil 45 A</b>	<b>Transil 45 B</b>
Appearance	low viscous liquid	viscous liquid
Colour	translucent	transparent
Density at 23 °C .	approx. 1,08 g/cm <sup>3</sup>	approx. 1,08 g/cm <sup>3</sup>
Viscosity at 23 °C	approx. 500 mPa·s	approx. 40.000 mPa·s

**2. Mixed components**

Transil 45 A 10 parts

Transil 45 B 100 parts

Mixing viscosity at 23°C, approx. 40.000 mPa·s

Working time at 23 °C , approx. 85 minutes

Tack-free time at 23 °C < 24 hours

### 3. Cured compound

#### Mechanical properties

Curing conditions:	23 °C / 24 h
Shore A hardness	
(DIN 53 505)	48
Tensile strength	> 5,0 N/mm <sup>2</sup>
(DIN 53 504 – specimen S3A)	
Elongation	270 %
(DIN 53 504 – specimen S3A)	
Tear strength	
(ASTM D 624 – die B)	
Shrinkage	> 18.5 N/mm
After 7d/23 °C	< 0,1 %

### Handling Precautions

#### Caution

Our products are generally quite harmless to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come into contact with foodstuffs or food utensils, and measures should be taken to prevent the uncured materials from coming into contact with the skin, since people with particularly sensitive skin may be affected. The wearing of impervious rubber or plastic gloves will normally be necessary; likewise the use of eye protection. The skin should be thoroughly cleansed at the end of each working period by washing with soap and warm water. The use of solvents is to be avoided. Disposable paper – not cloth towels – should be used to dry the skin. Adequate ventilation of the working area is recommended.

These precautions are described in greater detail in the Material Safety Data Sheets for the individual products and should be referred to for fuller information.

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