

# BLUESIL<sup>TM</sup> TCS 7550 A & B

**Description** **BLUESIL TCS 7550 A & B** is a two-component heat curing liquid silicone elastomer which cures by a polyaddition reaction. All products from the **Textile Coating System** product line are specially engineered for textile coating applications.

- Advantages**
- High bond strength without primer on textiles from different origins.
  - Allows very low coat weights (< 30 g/m<sup>2</sup>)
  - Provides high tear strength and high comb stripping resistance to the coated fabric.
  - Low thermal conductivity (high insulation properties).
  - Long bath life at room temperature (> 16 h).
  - Fast cure at elevated temperature
  - Solventless technology.
  - Medium viscosity.

**Examples of applications** Technical textile coatings, such as coated airbags, industrial and high performance fabrics.

## Characteristics

### 1. Before mixing

	<b>BLUESIL TCS 7550 A</b>	<b>BLUESIL TCS 7550 B*</b>
Appearance	viscous liquid	viscous liquid
Colour	beige	blue
pecific gravity at 25 °C	1.27	1.23
Viscosity at 25 °C, mPa.s	90,000	30,000

(Measured with Brookfield viscometer, needle n° 6, speed 5 rpm)

\* Other colours may be available upon request.

### 2. Mixing the two components

<b>BLUESIL TCS 7550 A</b> catalyst.....	50 parts
<b>BLUESIL TCS 7550 B</b> .....	50 parts
Pot life of mixture at 23 °C, h, approx.....	24
Mixture viscosity at 25 °C, mPa.s .....	60,000
Cure time at 150 °C, min., approx .....	1

### 3. Mechanical properties of the cured material

(measured after 1 h curing at 150 °C)

Hardness, Shore A, approx. ....	52
Tensile strength, MPa, approx. ....	5.5
Elongation at break, % approx .....	200
Tear strength, KN/m, approx. ....	13

# BLUESIL™ TCS 7550 A & B

**Characteristics (cont')**

**4. Application properties of the coated textile**

(coating of 40 g/m<sup>2</sup> on dtex 470 polyamide 6.6)

Flex abrasion resistance, cycles ..... > 500  
(ISO 5981A)

Flame resistance ..... self-extinguishing  
(FMVSS 302)

Air permeability at 500 Pa, l/dm<sup>2</sup>/min, approx. .... 0  
(DIN 53887)

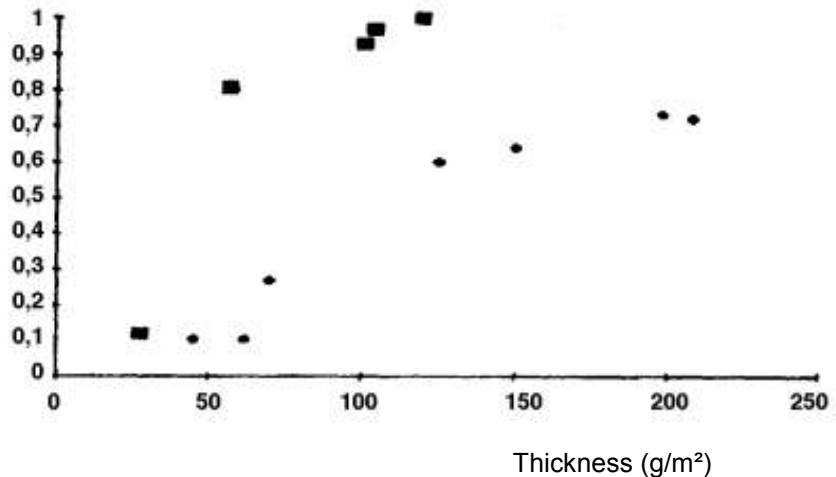
**5. Product performance as a fabric bonding agent**

(as a function of the weight applied at 35 N/cm<sup>2</sup> pressure

and 160 °C for 3 min) ..... 100 % cohesive break

**BLUESIL TCS 7550 A & B** bonding two different fabrics as a function of their thickness:

Peeling force  
(N/mm)



◆ BLUESIL TCS 7550 A & B on polyester fabric  
■ BLUESIL TCS 7550 A & B on polyamide fabric

Peeling force (NFT 46055) 100 µm thickness, N/mm

**Processing**

Some fillers may settle during transport and storage. To ensure a uniform mix, the components should be thoroughly stirred prior to use.

Adhesion depends on the curing conditions. A preliminary test is recommended to determine optimum cure conditions.

In case of hand mixing, degas the mix under vacuum 3-5 kPa before pouring.

Curing inhibition may occur in contact with certain materials containing **tin salts**, **amines** or **sulphur**. A preliminary test is recommended.

**Packaging**

**BLUESIL TCS 7550 A & B** is supplied in 25 and 200 kg containers.

# BLUESIL™ TCS 7550 A & B

## Storage and shelf life

For its shelf life, please refer to the expiry date (best before « month-year ») marked on the packaging.

To preserve all the properties of **BLUESIL TCS 7550 A & B**, the following conditions must be observed:

- The original closed packs must be kept at a temperature between – 20 °C and + 30 °C.
- The product must be used as soon as the packs are opened.

## Safety

Consult the Safety Data Sheets for **BLUESIL TCS 7550 A & B**.

Visit our website [www.bluestarsilicones.com](http://www.bluestarsilicones.com)

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