



Transil 20: Parts A&B

Description:

Transil 20 A&B is a two component silicone elastomer that crosslinks at room temperature by polyaddition reaction. The polymerisation can be accelerated by heat.

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

Advantages:

Transil 20 A&B polymerises at room temperature (23°C) even in the absence of air and moisture. The curing characteristics are independent of the thickness of the parts.

- Fast mixing and easy processing (1:1) due to the low viscosity.
- Excellent mechanical properties (especially good tear strength).

Characteristics:

1. Characteristics of the non cured product

Properties	A	B
Appearance	low viscous liquid	
Viscosity (at 23°C, mPa.s, ISO 3219, approx.)	6000	6000
Colour	Translucent	
Specific Gravity (g/cm ³)	1.08	1.10

2. Polymerisation (100 parts A : 100 parts B)

Properties	A&B
Mix Viscosity (at 23°C, mPa.s, approx.)	7000
Working Time (at 23°C, 50% Rel. Humidity, mins)	4
Demolding Time (at 23°C, 50% Rel. Humidity, mins)	35

3. Cross linked product

Properties	A&B
Hardness Shore A (Shore A, after 96h)	20
Elongation at break (%)	500
Tear strength (kN/m)	15
Tensile strength (N/mm ²)	4

Remark: Curing the silicone at elevated temperature has no significant influence on the properties of Transil 20 A&B. Nevertheless it has to be mentioned, that heating can cause an alteration of the dimensions.

Processing: **Remix each of the two components (parts A & B) every time before using.**

1. Mixing the components

Transil 20 A&B is mixed by weight in a fixed ratio given above. The two components may be thoroughly mixed either by hand or using a low-speed electric or pneumatic mixer to minimise the introduction of air and to avoid any temperature increase.

Note: *It is also possible to use a special mixing and dispensing machine for the two silicone components. Further information is available upon request **+44 (0) 1638 750679***

2. Degassing

The mixture should be degassed preferably at 30 to 50 mbar to eliminate any entrapped air. If a dispensing machine is used, the two components are degassed prior to mixing.

The silicone mixture expands to 3 to 4 times of its initial volume and bubbles rise to the surface. The bubbles progressively disappear and the mixture returns to its initial volume to complete the degassing, and then flash the vacuum. The silicone is ready for pouring, either by gravity or under low pressure.

Note: *Flashing the vacuum once or twice accelerates the degassing. It is recommended to use a container with a high diameter/height ratio (3 to 4 times of the initial volume).*

3. Polymerisation

The system, as indicated in the technical data, polymerises at 23°C. The curing may be slowed down at lower temperature and contrary accelerated by applying heat.

Note: In general contact with certain materials can inhibit the crosslinking. See list below:

- Natural rubbers vulcanised with sulphur
- RTV elastomers catalysed with metal salts, e.g. tin-compounds
- PVC stabilised with tin salts and additives
- Epoxy catalysed with amines
- Certain organic solvents, e.g. ketones, alcohols, ether etc.

If doubts exist it's recommendable to run a quick test with a small quantity of material in order to assess compatibility. Take duty note that cross contamination due to not well cleaned tools or devices is frequently the main cause of inhibition. The best way is to use only dedicated gear when processing polyaddition RTVs.

Packaging:

Transil 20 A&B is available in the following packaging:

- 2 kg pots
- 10 kg pots
- 20 kg pots
- 50 kg pots

Storage & Shelf Life:

When stored in the original unopened packaging, at a temperature of between -5°C and +30°C, Transil 20 A&B may be stored for up to 6 months, from the date of manufacture clearly marked on the packaging.

Beyond this date, Mouldlife no longer guarantees the conformity of the product with the sales specifications.

Safety:

Please consult the Safety Data Sheets of Transil 20 A&B.



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