

ALPA-SIL 32



two component silicon elastomer that crosslinks at room temperature by polyaddition reaction

- polymerises at room temperature (23 ° C)
- cures without any shrinkage.
- Exceptional mechanical properties.
- Fast mixing (1:1) and easy processing.
- As “transparent Version” tested acc. Food and Feed Law
- Important: According to the Food and Feed Law the silicone has to cure under 200°C for 4 hours.

Mould-making

TECHNICAL DATA

	ALPA-SIL 32 Component A	ALPA-SIL 32 Component B	
Appearance	viscous liquid	low viscous liquid	
Colour	Yellow	Red	
Viscosity appx at 23°C	28.000	20.000	mPas ¹⁾
Density appx. at 23°C	1,08	1,08	DIN 53 479 ¹⁾
Mixing ratio	Mixture 100:100		by weight
Viscosity			mPas ¹⁾
Pot Life	30		Minutes ¹⁾
Earliest Demould after	4-6		Hours ¹⁾
	Vulcanized material after curing for 24h		
Hardness Shore A	36		DIN 53 505
Tensile Strength	> 3,8		N/mm ² DIN 53 504 S 3 A
Elongation at Break	260		% DIN 53 504 S 3 A
Tear Resistance	> 17		N/mm ASTM D 624 Form B
Linear Shrinkage			% ISO 4823
1) = Measured at Standard Climate according to DIN 50 014-23/50-2			

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PROCESSING

1. Mixing the two components

ALPA-SIL 32 component A + B are 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. The mixed components should get degassed with 30 – 50 mbar, to remove the introduced air.

The mixed silicone rubber is expanding under vacuum on the three- or fourfold of the usual volume and the air bubbles go up on the surface. After approx. 5-10 minutes the mixed silicone rubber is getting back on the original volume. After a few more minutes the degassing is finished and the vacuum can be stopped.

It is also possible to use a special mixing and dispensing machine (e.g. MDM 3) for the two silicon components. Further information is available upon request.

2. Polymerisation

The RTV-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.

In general contact with certain materials can inhibit the crosslinking of RTV. 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.

In case of doubts, it is recommended to test before.

Warning:

for mixing use only clean stainless steel or plastic vessels. Crosslinking of ALPA-SIL vulcanising by polyaddition reaction may be inhibited by contact with products like:

- heavy metal salts
- amines
- sulphur and derivatives
- catalysts of epoxy resin

SPECIAL NOTES

Storage

ALPA-SIL 32 must be used within 9 months of the manufacturing date.

Keep the original packaging closed and at a temperature below 30 ° C and frostfree.

SAFETY

The usual precautions have to be taken into consideration in case of contacts with ALPA-SIL 32.

Warning to users:

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and is in no way binding, particularly as regards infringement of or prejudice to third party rights through the use of our products.

PACKAGING UNITS

Komponent A: 1 kg, 5 kg, 25 kg

Komponent B: 1 kg, 5 kg, 25 kg

If needed special containers are available on request.

For safety related data please refer to the safety data sheet !

Please note: All given data are based on careful examination in our laboratories and our past practical experience. These are non-binding indications. Given the high number of materials appearing on the market and the different methods of use which are beyond our influences and control, we naturally cannot accept any responsibility for the results of your work, also with regard to third party patent rights. We recommend that sufficiently thorough tests be carried out to ascertain whether the product described will meet the requirements of your particular case.

Please also note our Terms of Sale, Delivery and Payment. This Product information replaces all previous issues.