# TECHNICAL DATASHEET

**SIL1000** November 2023

Silicone one component low viscosity

## PRODUCT DESCRIPTION

R15220 is a fluide silicone that can be used as protection against harsh environment in thin layer to protect electronic components.

## FEATURES

- Neutral curing 1-component silicone filling compound based on alkoxy
- Excellent flowability
- Cures at room temperature
- Excellent primerless adhesion on numerous substrates
- With UV-indicator (for the quality control/inspection of the application via UV light)
- Meets UL FLAME CLASSIFICATION 94 HB

## APPLICATION

Before applying this product, the user has to ensure that the materials in the area of contact (solid, liquid and gaseous) are compatible with it and also amongst each other and do not damage or alter (e. g. discolour) each other. As for the materials that will be used at a later stage in the surrounding area of the product the user has to clarify beforehand that the substances of content or evaporations do not lead to an impairment or alteration (e. g. discolouration) of the product. In case of doubt the user should consult the respective manufacturer of the material.
During curing small amounts of alcohol are released.

Ensure good ventilation during application and curing. Paints, lacquers, plastics and any other coatings must be compatible to the adhesive/sealant. The required vulcanization time prolongs with increasing thickness of the silicone layer. One-component silicones must not be used for full-surface bonding applications unless special constructional prerequisites are met. If one-component silicones are to be used for thickness layers of more than 15 mm please contact our technical department beforehand. Contact with chemicals and when used in light protected applications can lead to a slight yellowing of the cured product. A possible change in colour does not necessarily influence the functionality.

## PREPARATION OF THE PCB

The adhesive surfaces must be cleaned and any contamination such as release agents, preservatives, grease, oil, dust, water, old adhesives/sealants and other substances impairing adhesion must be removed. The adherent surfaces have to be clean, free from fat, dry and sustainable.

The demands on elastic sealings and bondings depend on the respective exterior influences. Extreme fluctuations in temperature, tensile or shear forces, repeated contact with water etc. demand high requirements of a bonding. In such cases it is advisable to apply primer in order to achieve a resilient bonding. Please consult our technical department.

**PROPERTIES**

| | |
|---|---|
| Color | Transparent |
| Skin forming at 23°C/50%RH (minute) | 25 |
| Curing n 24 hours at 23°C/50%RH (mm) | 2-3 |
| Viscosity Brookfield (cps) at 25°C | 1000 |
| Density at 23°C according to iSO 1183-1(g/cm3) | 0,98 |
| Shore A | 20 |
| Tensile expansion according to ISO 37, S3A(%) | 200 |
| Tensile strengh according to ISO 37, S3A(N:mm2) | 0,6 |
| Tenperature resistance from/to (°C) | -40 +180 |
| Dielectric Stength DIN EN 60243-1(KV/mm) | 17 |
| Volume resistance IEC 62631-3-1 (Ω*cm) | 1*10^12 |
| Self life at 23°C/50%RH (Months) | 12 |

(1) After complete curing a temperature resistance up to approx. +180°C can be reached. This can lead to a slight yellowing . Constant use under high temperatures and /or high humidity (RH > 60%) may change the properties of the material or lead to an interaction with neighbouring materials

(2) from date of manufacture

**PACKAGING:** **REFERENCES**

SIL1000 05L SIL1000 05L

SIL1000 is compliance with REACH and RoHS regulations. If you want a certificate, please contact us (info@abchimie.com).

***STORAGE:***

We recommend to store our products in unopened original packagings dry (< 60 % RH) at temperatures of +15 °C up to +25 °C. If the products are stored and / or transported at higher temperatures / air humidity for longer periods (some weeks), a diminuition of durability or a change of material characteristics may arise.

***All information is given in good faith but without warranty. Properties are given as a guide only and should not be taken as a specification. ABchimie cannot be held responsible for the performance of its products within any application determined by the customer, who must satisfy themselves as to the suitability of the product.***