COPSIL 65

The silicone elastomer COPSIL 65 is made of a filled two-component system (resin and hardener) to be mixed in equal parts. It cures at room temperature by polyaddition reaction with a platinum complex based catalyst. This reaction can be accelerated by heat. The final polymer reaches a hardness of 65 Shore A. It can be used in contact with the skin as it complies with the ISO 10993-5 standard.

Application in orthoprothesis: Easy to use, this silicone elastomer is aimed to the copying of either diagnostic sockets (in thermoplastic) or definitive sockets (in acrylics / epoxy).
Advantages compared to PU alternative:

- Not dangerous for health (vs. PU isocyanate)
- Fast to process
- Do not heat during polymerization
- Can be used directly on thermoplastic socket (no need for releasing agent)

Mixing of the components

The weighing of the components must be done in the same container, starting with the hardener (grey) and then the resin (blue). The mixing ratio must be respected as precisely as possible.
The mixing will be done manually and energetically until the color mix is homogeneous (blue).

Casting and reactivity

The crosslinking reaction for polyaddition silicones catalyzed with platinum complex can be inhibited by contact with certain materials, i.e. products with natural rubber vulcanized with Sulphur (DO NOT use latex gloves, only vinyl gloves), from chlorine, from certain synthetic rubbers, from certain polycondensation silicones catalyzed with tin salts, from certain plasticizers, from amines used as hardener in epoxy resins, plastiline, etc...
This list is not exhaustive, and we always advise a trial run.

Do not to use Vaseline as it alters the polyaddition silicones.

Characteristics of the polymerized product

Hardness Shore A: approx. 65

Maximum elongation in %:

- on unnotched rings: approx. 80
- on notched rings: approx. 40

Maximum resistance in N/mm²:

- on unnotched rings: approx. 3.3
- on notched rings: approx. 1,1

Characteristics of the liquid product

Aspect:
Blue for the resin and grey for the hardener.

Density:
Approx. 1.36 for the two components.

Viscosity at 20 °C in mPa.s:

- Approx. 40 000 for the resin
- Approx. 50 000 for the hardener

Mixing ratio in weight:

Resin	100 parts
Hardener	100 parts

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TIME	COPSIL 65
Working time at 20°C	3 min
Demolding time at 20°C	20 min
Final hardness at 20°C	40 min

Packaging

The COPSIL 65 is available in 500 g pots, as well as in 5 kg buckets. Here are their references:

PACKAGING	REFERENCE
500 g	CF-65SR R01 resin
	CF-65SR D01 hardener
5 kg	CF-65SR R05 resin
	CF-65SR D05 hardener

Storage, handling and safety

In its original packaging, the silicone elastomer COPSIL 65 is guaranteed 12 months if both components are stored away from light, humidity, well closed and at a room temperature below 30°C.
Rather use these products as soon as they are open. Usual health and safety conditions must be applied during the handling of the COPSIL 65. To do so, please read carefully our H&S Data Sheet, as well as the information given on the product's label.
Information contained in this document is supplied in good faith and based on our current knowledge. It is for indication and not formal constraint, in particular if this product is not used according to the applications expressed in this technical index card. A preliminary test will always be advised to be sure that the product corresponds to the customer’s requirements.
The user of this product undertakes to respect the current legislation for the elimination of waste.

Customs’ code

COPSIL 65 resin & hardener	39100000