COPSIL HTV 70 (1K)



COPSIL HTV 70 is a high temperature vulcanization silicone elastomer with high mechanical properties. The COPSIL HTV 70-M is a one component system. It crosslinks at heat by polyaddition reaction thanks to a platinum complex based catalyst.
It is used for the manufacturing of very comfortable custom-made devices with a hardness of 70 Shore A. Also, it can be colored according to your needs and it can be used with COPSIL HTV silicones of different hardness to adapt device properties on specific areas. It can be used in contact with the skin as it complies with the ISO 10993-5 standard.

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 polycondensation silicones catalyzed with tin salts, amines used as accelerators in epoxy resins, plastiline, etc. Avoid any trace of humidity on the material during the transformation and the cooking.
This list is not exhaustive, and we always advise a trial run.

Our releasing agent P232-V2 can be used on the plaster mold to facilitate the removing of the silicone once it is cure.
Do not use vaseline which inhibits polyaddition silicones.

	COPSIL HTV 70
Curing temperature	110°C
Curing time	1 h *

(*): The mechanical characteristics of the COPSIL HTV 70 are reached after 1 h at 110°C starting from the moment the plaster mold reaches 110°C (it varies depending the mold size).

Characteristics of the polymerized product

Hardness Shore A: 70 +/- 5
**ISO 7619*
Max. elongation in %: min. 550
**ISO 37*
Max. resistance in Mpa: min. 10.5
**ISO 40*
Tear resistance in kN/m: min. 46
**ISO 34*

Characteristics of the uncured product

Aspect:
Transparent, lightly translucent.

Density:
Approx. 1.1

Remarks:
Activation temperature of COPSIL HTV 70 is 70°C. However, the necessary temperature to obtain a complete vulcanization is 110°C.
Plaster mold needs to be perfectly dry to avoid bubbles related problems.

Packaging

The COPSIL HTV 70 is available in 2 kg blocks. Here are their references:

PACKAGING	REFERENCE
2 kg	HTV70 M02 resin

Storage, handling and safety

In its original packaging, the silicone elastomer COPSIL HTV 70 is guaranteed:

- 6 months if stored away from light, humidity at room temperature <25 °C.
- 12 months if stored away from light, humidity and keep in the fridge at 4°/5°C.

Remark: Before to use COPSIL HTV 35, let it naturally return to room temperature to prevent condensation which can disrupt polymerization.

Rather use these products as soon as they are open. Usual health and safety conditions must be applied during the handling of the COPSIL HTV 70. 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 HTV 70 mono component	39100000