TOPSIL SILICONE

Technical Information

Tin Cure Silicone Rubber/Mold Making

Application:

Tin cured silicone is suitable for general mold making of resins, plaster works, GRC/GRG, GFRC and artificial stone, concrete, PU furniture, bronze casting ,candle, soap, Low melting point alloys toys, shoe sole molds, art&sculpture casting , climing holds molding etc.




Characteristics:

Pourable, condensation-curing, two-component silicone rubber that vulcanizes at room temperature.

Features:

① very good flow
② High tear strength
③ Long shelf life
④ heat resistance for casting resin
⑤ Medium hardness
⑥ Work well with thixotropic agent

TOPSIL SILICONE

Product Data:

Tin cured Series	Hardness (Shore A)	Mixing Ratio	Viscosity (mPa.s)	Working Time (25℃) mins	Curing Time (25℃) hrs	Tear Strength (kN/m)	Tensile Strength (Mpa)	Elongation (%)
TC-05	5±2	100A:3B	5000 ± 2000	30~40	4~6	≥12	≥1.8	≥500
TC-10	10±2	100A:3B	8000 ± 2000	30~40	4~6	≥18	≥3.5	≥600
TC-15	15±2	100A:3B	11000 ± 2000	30~40	4~6	≥26	≥3.8	≥580
TC-20	20±2	100A:3B	11000 ± 2000	30~40	4~6	≥25	≥4.5	≥500
TC-25	25±2	100A:3B	16000 ± 2000	30~40	4~6	≥28	≥4.8	≥500
TC-30	30±2	100A:3B	21000 ± 2000	30~40	4~6	≥28	≥4.8	≥450
TC-35	35±2	100A:3B	18000 ± 2000	30~40	4~6	≥26	≥4.5	≥350
TC-40	40±2	100A:3B	12000 ± 2000	30~40	4~6	≥24	≥4.5	≥280

ATT:

1.)Color options available—red, pink, green, blue, and more.
2.)Working and curing times adjustable to suit your process.
3.)Tailored viscosity, tear strength, and tensile strength for optimal performance.

Instructions:

1. **Master Preparation**

Clean the master; ensure it is dry and free of oil, dust, and moisture. Seal porous surfaces and apply release agent.

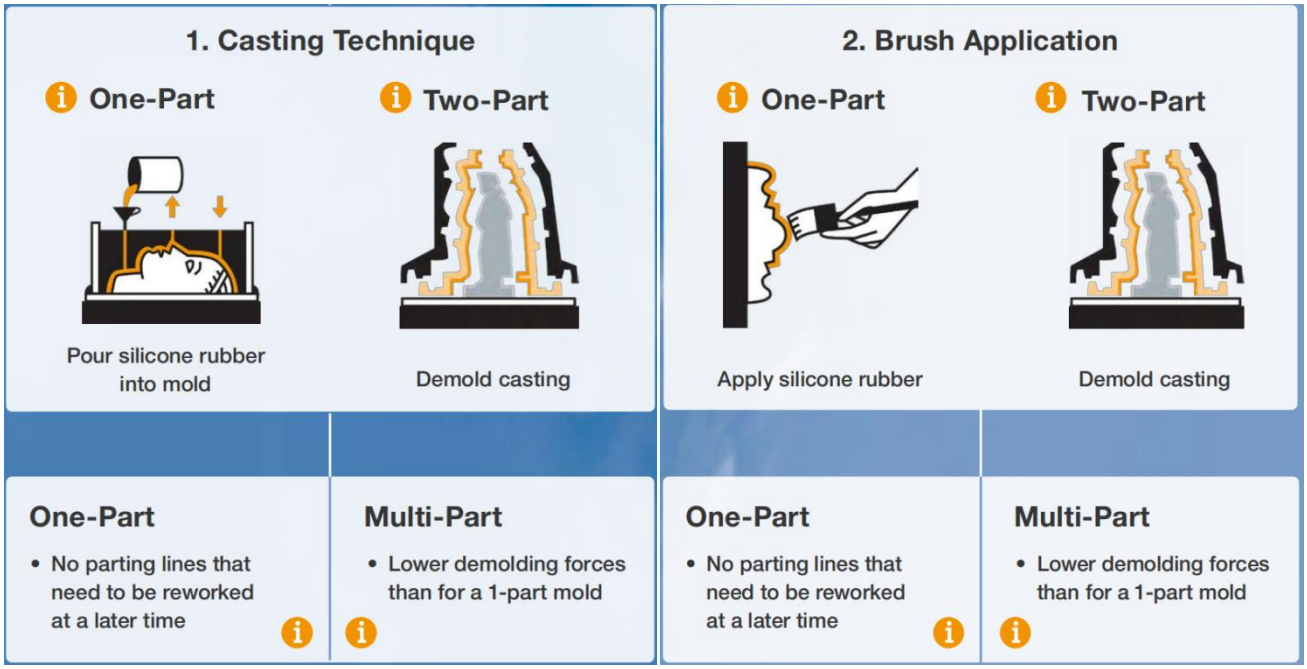
2. Containment & Parting
Build a containment wall around the master. Define the parting line for easy demolding.

3. Mixing
Weigh base and catalyst according to the manufacturer's ratio (e.g., 100:2). Mix thoroughly for 2–3 minutes until uniform. Vacuum degas for 2–5 minutes to remove bubbles.

4. Pouring / Brushing
Pour silicone slowly from the lowest point to avoid trapping air. For large or complex molds, brush a first layer and reinforce with gauze between subsequent layers.

5. Curing
Cure at room temperature for 4–8 hours (initial cure); allow 24 hours for full cure. Low temperature or high humidity extends curing time.

6. Demolding
Remove the containment walls and carefully take out the master. Let the mold rest for 24 hours before first use



TOPSIL SILICONE

Important Notes:

1)Use separate tools and containers for condensation-cure and addition-cure (platinum) silicone. Cross-contamination can prevent curing.

2)Maintain the specified catalyst ratio. Using too little will leave the material uncured, while too much can cause brittleness or an oily surface.

3)Avoid high humidity, as it may interfere with surface curing. Work in a reasonably dry environment for best results.

Package:

Part A	1kg/tin	5kg/tin	20kg/drum	25kg/drum	200kg/drum
Part B	300g/bottlle	150g/bottle	600g/bottle	750g/bottle	1kg/bottle

Shelf Life:

At least 18 months from the date of production.

Storage&Cautions:

* It should be stored in a dry place in its original sealed container.
*Read the product safety data sheet(MSDS) carefully before using, which can be got from the supplier.