



TAP Platinum Silicone is a bi-component addition (platinum) cured RTV silicone rubber which vulcanizes at room temperature. It is translucent, which allows viewing of the object being molded. Due to considerable fluidity it is recommended for the duplication of models with accentuated undercuts. For vertical applications, silicone can be thickened to a non-sag paste by adding TAP thixotropic additive. This silicone has the unique property of not sticking to itself. This makes it ideal for two-part molds. If you are applying layers, do so before silicone cures. Otherwise the layers will de-laminate.

Platinum cured silicone offers superior performance:

- Excellent mechanical characteristics (tear resistance, flexibility, etc.)
- Excellent dimensional stability (shrinking .01%)
- Much greater mold durability for longer production runs
- Easy 1-to-1 mix ratio
- 100% non-toxic
- Low viscosity, so no need to de-air

Compatible with plasters, coatings, polyurethane, polyester, and epoxy resins.

### Main Application Sectors

- Mechanical due to its high deadening power
- Electronic due to its good resistance to high temperatures
- Tampography due to its high mechanical resistance and excellent ink transfer property
- Moldmaking due to its considerable precision in reproduction and high dimensional stability
- Podology due to its softness

### Properties

- Excellent for two-part molds. Mold release not required between cured layers.
- High chemical resistance to the aggressive components of some types of resin
- High level of accuracy in reproduction
- High dimensional stability over time
- Considerable resistance to high temperatures and to ageing
- Excellent non-stick effect

### Chemical and Physical Characteristics

Mixing ratio	1 : 1
Viscosity of the mix pre-catalisation	900 - 1100 cP
Mixing time at 23 °C (73 °F)	1 minute
Working time at 23 °C (73 °F)	15 – 18 minutes
Setting time at 23 °C (73 °F)	2 hours
Hardness Shore-A after 24 hours	8 ± 1 ShA
Tensile strength	218 psi
Elongation at break	280%
Tear resistance (Die B)	17 ± 3 ppi
Tear resistance (Die C)	17 ± 3 ppi
Maximum Casting Temperature	500°F
Volume per pound	~15 fl oz. or ~444 cc.

(see back)



### Material that causes problems

Platinum cure silicone can be inhibited (prevented from curing) if it comes in contact with certain materials. (Note: To seal a model, use acrylic paint—not latex or polyurethane.)

For proper cure, **avoid the following materials:**

#### TIN CONTAINING COMPOUNDS

Condensation cure silicones

#### SULFUR CONTAINING COMPOUNDS

- Thiols
- Sulfates
- Thioureas
- Sulfides
- Sulfites

Latex (gloves, tubing, paint, etc. Note: some aerosol paints contains latex)

Wood

Natural Rubber

PVC (plasticized)

Neoprene rubber

#### NITROGEN CONTAINING COMPOUNDS

Epoxy/amine cure materials

#### URETHANES (ISO-Cyanates)

Polyurethane Paint      Urethane RTV

#### UNSATURATED HYDROCARBON PLATIZERS

#### HIGH ACID CONTENT PVC

*Other materials which have been found to inhibit the cure of two-compound addition cure silicones:*

- Dow Corning® 630 protective coating
- Dow Corning® 3110, 3111, 3112, 3116, and 3120 RTV silicone rubber cured with Dow Corning
- RTV catalysts S, F, or H; cured seven days at room temperature  
(Dow Corning 3110, 3111, 3112, 3116, and 3120 RTV silicone rubbers cured with Dow Corning RTV catalyst S, F, and H at room temperature plus 4 hrs at 150°C do not inhibit cure.)
- Polysulfide MIL-S-8516
- Humiseal® 1B-27 coating
- Mystik® 6207 tape, Mystik® 6215 tape
- Scotch® cellophane tape, Scotch® 360 tape
- Permacel® masking tape
- Vinyl electric tape
- Pliobond® adhesive
- Buna N rubber
- GRS rubber, Natural rubber
- Viton A rubber
- Acid core solder flux, Rosin core solder flux
- Some pigments and dyes