

Platinum cure RTV-2 Silicone Mold Rubber

- Strength improved by 27%
- 100% No Shrink on cure
- FDA Approved



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Mobile/WhatsApp: +86 170 9724 3241 **SUPERSIL MATERIALS CO., LTD** Dongguan, China





Description

P- Pro series Platinum cure silicone rubbers are platinum-cured (also known as addition-cure), room temperature-curing silicones that cure to flexible, super-strength rubbers. Platinum cured molds offer excellent release properties and release agent is not necessary when casting most materials.

Compared to tin-cured silicone rubbers, platinum cured silicones exhibit long library life and non-shrinkage on cure.

Key features

- Super strong Tear and Tensile strength, durable using life
- 100% No shrink on cure, No deformation
- · High heat and chemical resistance, long service life
- High elasticity, for easy removal of, complex replica parts
- Compliance with FDA Certificate, Odorless, Non-toxic, food-grade



Typical Uses & Casting Materials

Platinum cure silicone is designed for molding a variety of industrial and art-related applications including, Making molds to reproduce prototypes, furniture, sculpture, concrete, plaster, gypsum, fiberglass, wax/candle crafts, toys, soap, artificial stones, cement decoration, GRC, GRG and also food product items.

Especially for high precision products and request a no-shrink on cured mold, like Prototype mold making for electric & electronics industry such as TVs, Home appliances, mobile phones, copy machines, etc. and automotive industry such as console boxes, radiator grilles, lamp housings, etc.

| Physical Properties | P-Pro 10 | P-Pro 15 | P-Pro 20 | P-Pro 25 | P-Pro 30 | P-Pro 35 | P-Pro 40 |
|-------------------------|-------------------------|----------|--------------------|----------------------|-------------|-------------|-------------|
| Properties | | | 20 | 25 | 30 | 33 | 40 |
| Hardness (A) | 10A | 15A | 20A | 25A | 30A | 35A | 40A |
| Mixing Ratio | 1A:1B or | 1A:1B or | 1A:1B or | 1A:1B or | 1A:1B or | 1A:1B or | 1A:1B or |
| (By weight) | 100A:10B | 100A:10B | 100A:10B | 100A:10B | 100A:10B | 100A:10B | 100A:10B |
| Color | A: Translucent | | | | | | |
| | B: Translucent | | | | | | |
| Mixed Viscosity | 30,000- | 30,000- | 30,000- | 30,000- | 30,000- | 30,000- | 30,000- |
| (Cps) | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 |
| Working time | Standard type: 30-40Mir | | 40Mins | Slow type: 60-90Mins | | | |
| Cure time | Standard type: 5-8hrs | | Slow type:10-12hrs | | | | |
| Tear strength (KN/m) | ≥16 | ≥18 | ≥22 | ≥26 | ≥28 | ≥24 | ≥21 |
| Tensile Strength | ≥3.5 | ≥3.8 | ≥4.2 | ≥4.5 | ≥4.8 | ≥4.5 | ≥4.5 |
| (Mpa) | | | | | | | |
| Elongation (%) | ≥600% | ≥550% | ≥550% | ≥500% | ≥450% | ≥400% | ≥380% |
| Shrinkage (%) | 0% | 0% | 0% | 0% | 0% | 0% | 0% |





Instructions

- 1. Stir Part A and Part B well before use.
- 2. Weigh 1 Part A to 1 Part B using an accurate scale and a clean mixing container.
- 3. Vigorously mix and scrape walls of the container, continue mixing until uniform.
- 4. Place the mixture in a vacuum chamber & degass. If without a chamber, Pour the mixture 2-3 inches above the pattern in a thin stream.
- 5. Allow the silicone to cure 2-4 hours and demold with care.

Important tips

- 1. Before use, read operation manual please.
- 2. Before large production, a small-scale test is recommended.
- 3. Mixing ratio must be accurate, mixing ratio is A:B=1:1 (by weight)
- 4. Use a vacuum to de-gas this product before use under pressure. Vacuum silicone for 2-3 minutes (29 inches of mercury). Leave enough room in the container for silicone to expand.
- 5. This product has limited shelf life. Use as soon as possible after opening.
- 6. Always tightly reseal containers after use. Air, moisture or other contamination causes a reduction in reactivity over time.

Package

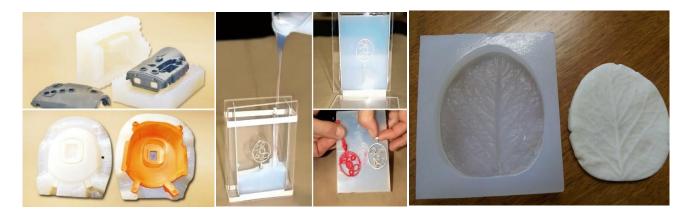
| Silicone | 1kg/barrel | 5kg/barrel | 20kg/barrel | 200kg/barrel |
|----------|------------|------------|-------------|----------------|
| Catalyst | 1kg/barrel | 5kg/barrel | 20kg/barrel | 10kg/container |



Storage & shelf-life

16+ months, should be stored in original, unopened containers between 15 and 25°C.

Always tightly reseal containers after use. Air, moisture or other contamination causes a reduction in reactivity over time, out of direct sunlight and away from direct sources of heat.





Especially Caution for platinum cure silicone

Platinum cure silicone rubber may be inhibited by certain contaminants resulting in tackiness on the surface of the mold. Latex, sulfur-based clays, tin cured silicone rubber, amines, nitriles, organo-metallic salt-containing compounds should be avoided. If you are unsure of the compatibility of the substrate being molded a small test is recommended. To prevent inhibition it is usually helpful to coat the pattern with clear acrylic lacquer or paint. Do not use polyurethane or latex.

A Comparison: Tin-cured silicone vs. Platinum-cured Silicone Mold Rubbers.

| Rubber Type | Advantages | Disadvantages | Casting Materials | Methods |
|----------------|-------------------------------------|--------------------------|---|-------------|
| Platinum-Cured | No release agent needed. | Cure inhibited by some | Most materials, especially resins, foams, | Pour, Brush |
| Silicone Mold | No shrink on cure. | surfaces. | plaster, wax, concrete etc. and some low-melt | |
| Rubbers | Cured rubber has long storage life. | | metals and food grade products mould. | |
| | Excellent chemical resistance. | | | |
| Tin-Cured | High strength. | Shrinks on cure (~0.3%). | Most materials, especially resins, foams, | Pour, Brush |
| Silicone Mold | Excellent chemical resistance. | Cured rubber has limited | plaster, wax, concrete etc. | |
| Rubbers | Slight cheaper than platinum. | storage life. | | |
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Mobile/WhatsApp: +86-170 9724 3241 info@super-silicon.com SUPERSIL MATERIALS CO., LTD. Dongguan, China



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