

Shenzhen Jianghe New Materials Technology Co.,Ltd

Technical Data Sheet (TDS)

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Platinum Cured Silicone Rubber

Description

Addition-curing mold silicone is commonly referred to as two-component room-temperature vulcanizing (RTV) addition-curing silicone. Both silicone components A and B are free-flowing liquids. Component A contains a platinum catalyst or other additives. When the two components are mixed, they can cure at room temperature or with heat.

Features

1. Not limited by product thickness; capable of deep section cure
2. Low linear shrinkage ($\leq 0.1\%$); no by-products released during cross-linking, ensuring dimensional stability and high replication accuracy.
3. Excellent chemical resistance; heat resistance up to 250°C .
4. Food-grade, non-toxic and odorless; compliant with FDA food contact regulations.
5. High tensile and tear strength; suitable for repeated molding without deformation.
6. Good flowability for easy casting; cures at room temperature or with heat for convenient operation.

Applications

1. Precision mold making for metal crafts, alloy automotive parts, etc.
2. Mold production for epoxy resin, polyester resin, polystyrene, vinyl plastics, paraffin, and similar materials.
3. Mold manufacturing for large cement components, artificial stone, concrete products, etc.
4. High-precision prototype modeling and rapid prototyping design.
5. Food-grade mold production.
6. Custom formulation available based on specific customer product requirements.

Series 8 Addition-Cure Translucent Mold Silicone Parameters (25°C)

| Model | 800 | 805 | 810 | 815 | 820 | 825 | 830 | 840 |
|---|----------------------------|----------|-----------|-----------|-----------|-----------|-------------|-------------|
| Color | Translucent | | | | | | | |
| Hardness(Shore A°) | 0±2 | 5±2 | 10±2 | 15±2 | 20±2 | 25±2 | 30±2 | 40±2 |
| Mix Ratio (A:B) | 1:1 | 1:1 | 1:1 | 1:1 | 1:1 | 1:1 | 1:1 or 10:1 | 1:1 or 10:1 |
| Viscosity (mPa.s) | 1000±500 | 1500±500 | 2000±1000 | 3000±1000 | 5000±2000 | 6000±2000 | 7000±2000 | 8000±2000 |
| Tensile Strength (Mpa) | 2.5 | 3.0 | 4.0 | 4.7 | 4.8 | 5.7 | 7.0 | 7.5 |
| Tear Strength (kN/m) | 5±2 | 10±2 | 14±2 | 18±2 | 22±2 | 24±2 | 18±2 | 15±2 |
| Elongation (%) | 540 | 550 | 560 | 580 | 520 | 510 | 550 | 385 |
| Density (g/cm³) | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 | 1.07 | 1.13 | 1.14 |
| Operation Time (min) | 20-40 | | | | | | | |
| Vulcanization Time (h) | 3-5h(25°C), 20-30min(60°C) | | | | | | | |
| Line Shrinkage Not Rate (%) | ≤0.1 | | | | | | | |
| Note: The color, viscosity, operation time and hardness after curing in the parameter table can be adjusted according to customer's demand. | | | | | | | | |

Precautions

- Store the adhesive compound in sealed containers. Once mixed, use the compound within the specified timeframe to avoid waste.
- Do not allow the adhesive compound to come into contact with nitrogen (N), sulfur (S), phosphorus (P), tin (Sn), lead (Pb), alcohols, water, etc., such as organotin compounds, silicone rubber sulfur containing organotin, sulfides, sulfur-containing rubber, amine compounds, or amine-containing materials. It must also not come into contact with containers or molds previously used for condensation-cure rubber. Otherwise, the addition-cure liquid silicone rubber may become sticky, cure incompletely, or fail to cure altogether.

Packaging

A and B are 1:1 ratio of conventional packaging:

1Kg/set (Part A 500G + Part B 500G)

2Kg/set (Part A 1KG + Part B 1KG)

40 Kg / set (Part A 20KG + Part B 20KG)

50 Kg / set (Part A 25KG + Part B 25KG)

400 Kg / set (Part A 200KG + Part B 200KG)

A and B are 10:1 ratio for conventional packaging:

22 Kg / set (Part A 20KG + Part B 2KG)

220 Kg / set (Part A 200KG + Part B 20KG)

We support custom silicone colors, packaging, and labels; please feel free to inquire.