



TAP Silicone RTV System

Mold Making Silicone Compound

the fantastic
plastic place

Technical Data
T-4

DESCRIPTION

TAP Silicone RTV System is a medium strength, two component, tin catalyzed, and room temperature cured silicone rubber. It is designed as a 25 Shore A mold rubber – meaning it is flexible, good dimensional stability, good elongation and tear strength, low linear shrinkage, excellent long term retention of rubber properties and accurate detail reproduction. It is excellent for casting cement, vinyl, wax, plaster, low-melt metals, urethane resins, epoxy resins and polyester resins. It is a safe product to use when directions are followed fully.

Side A (Base Component) is an off-white liquid with medium viscosity of 29,000 cP. Side B (Catalyst Component) is a low viscosity blue translucent with a specific gravity of 1.16 g/cc. Side B requires stirring before use.

MIXING

Accurate measuring is essential. Inaccurate measuring causes changes in the physical properties of the cured material. Thorough mixing is also essential. Mix components by hand or with a mixer (electric drill fitted with Squirrel® type mixer or similar) until color is uniform (no whites or streaks). The most common causes of incomplete cure and mold failure is improper mixing.

RELEASES

Most projects using Silicone RTV do not require releases for the pattern and the mold. However, test for compatibility by using small samples of the actual materials planned for the intended project. Two part molds always require a release between the layers of silicone. Silica based materials (such as some types of glass) and anything containing silicone are prone to bonding and will likely require a release.

TAP Brown Mold Release Wax is a suitable release. Ordinary Vaseline petroleum jelly also works well. Again, it is recommended that small test samples be made prior to attempting a large project.

MOLD TYPES

In simplest terms, almost all molds can be categorized either as pour-on or brush-on. TAP RTV Silicone System can be used effectively for either type.

CASTING MEDIUMS

TAP Silicone RTV System is compatible with any of the casting materials stocked in our stores. It is also excellent for cement, plaster, wax, vinyls and low-melt metals.

Polyester resin does not require a release, but use of a release increases mold life and makes the cast part release easily. A release is especially recommended for Epoxy and Quik-Cast, and TAP's Pol-Ease 2300 is ideal for them. Fillers can be used with polyester, epoxy, and Quik-Cast to produce incredible effects and dramatically reduce cost. Experiment with the possibilities!

With all casting materials, the cast part should be removed from the mold as soon as possible to prevent mold degradation from heat and chemical migration.

STORAGE

Keep Side A and Side B containers tightly closed when not in use to prevent reaction with moisture in air. TAP Silicone RTV System (Side A) shelf life is 6 months in original unopened containers when stored at 75° F. TAP Silicone RTV Catalyst (Side B) shelf life is 6 months in original unopened containers when stored at 75° F.

For More Information read TAP's [Product Bulletin 7a](#) and [Product Bulletin 7b](#). Another invaluable source is the [Molding & Casting Handbook](#) by Thurston James, available from TAP.

WARRANTY

TAP Silicone RTV System is manufactured and tested to our quality specifications. Determine its suitability for your application by testing before using. TAP has no control over working conditions or methods used and will not be liable for damages exceeding the value of product.

PHYSICAL PROPERTIES

Mixed Ratio	10 parts Side A to 1 part Side B by weight
Specific Gravity	1.16
Color (mixed)	Blue
Hardness, Shore A	25-30
Working Time	30 minutes
Demold	Approx. 6 hours
Viscosity (mixed)	24,000
Tensile Strength	600 psi
Tear Shrinkage	125 ppi
Temperature Range	-50 to 150 (-58 to 302)

WARNING

TAP Silicone RTV System contains an organotin which may irritate or burn skin and eyes upon contact. If eye contact occurs, flushing with water for at least 15 minutes should relieve discomfort. If irritation or discomfort persists, obtain medical attention. Follow all instructions for safe use.

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Visit our website: tapplastics.com

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