

SILPAK ECONOSIL 25 A/B

Tin Base (Condensation Cure) RTV Rubber

ECONOSIL-25 A/B Tin Base (Condensation Cure), two-component, room temperature cure (RTV) rubber designed as a low cost mold material with good physical properties primarily for making short-run production molds. Use molds to cast polyester, urethane, epoxy, low melt metal (350F), thermoplastics (Polyvinyl), wax, soap, plaster, and any material where a release free casting is required.

Features

- Good Physical Properties
- Low Cost Mold Making Material

- Low Viscosity for ease of pouring
- Brush-On (Thixotropic) Catalyst *R-1300TH B* (All in one) or Thix 5170 Additive

Applications

Use mold for any material where a release free casting is required:

- Polyester
- Urethane
- Epoxy
- Soap

- Low melt metal (350°F)
- Thermoplastics (polyvinyl)
- Wax
- Plaster

Physical and Handling Properties

Property	Value
Color	Blue
Mix Ratio, by weight	10 Base : 1 Activator
Initial Mixed Viscosity, at 77°F, cP	50,000
Hardness, Shore A	25
Gel Time, min	40
Demold Time, hours	15-24
Specific Gravity	1.15
Tensile Strength, psi	450
Elongation, %	300
Tear Strength, pli	100

Values listed above are typical and not intended for use in specifications.

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Mixing & Curing

Adding the curing agent Econosil-25 B processes Econosil-25 A. The addition of 10% catalyst (by weight) has a pot life of 40 minutes and is ready for de-molding after 15 to 24 hours. After the mold has been removed from the master, it should be left for 24 hours in order to develop its maximum mechanical strength.

Brush On Molds

For Brush-On molds, use *R-1300th B* Catalyst or *THIX-5170* Additive. The first coat (Detail/Print Coat) should be applied using the *normal catalyst*—ECONOSIL-25 B. Mix a small batch and paint on the first layer, ensuring that the entire model is covered—Material will drip and pool around the base of model so a dam made of clay or cardboard should be made to contain material. Once material has gelled—60 to 75 minutes later—the brush on coat can be applied. Continue to build mold wall thickness by applying one coat after another, about an hour apart. This may take several coatings but the goal is to achieve a mold wall thickness of 3/8 to ½ inch. It is recommended when building a brush-on mold to complete it within a short period of time (within 24 hours) to avoid any adhesion problems between layers. Keep mold covered to avoid dust settlement that could affect the adhesion between coatings. Hot summer weather could shorten work time. Once rubber mold has been completed and is fully cured, the process of building a support mold made of plaster *(Castshell)*, fiberglass (*SLR*-22) or urethane plastic *(Trowel On 60)* to hold the thin rubber mold bladder is undertaken.

Faster Cure

To quick cure Econosil-25 RTV system, add drops of **Rapid Set** at appropriate ratio for a 1-4 hour demold time. Or, use additional catalyst at ratios of 12-15%. **Note:** The addition of Rapid Set or extra Catalyst will shorten storage shelf life of rubber.

Storage & Shelf Life

Base and Activator must be stored in their original, unopened containers at temperatures between 60-90F. Shelf life of materials when kept in unopened, sealed containers, at the recommended storage conditions, is 6 months.

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