



TC-5005 A/B - C

ROOM TEMPERATURE CURING SILICONE

PRODUCT DESCRIPTION:

TC-5005 A/B-C is a room temperature curing silicone elastomer intended primarily for making silicone skins, but is also used as a general purpose rubber. This product is a condensation cured system using a tin catalyst that provides a 1.5-2 hour work time with 16-24 hour demold time.

PRODUCT HIGHLIGHTS:

- Low viscosity and easily poured
- Can be used in many high-temperature applications
- Translucent in color
- High elongation

PHYSICAL PROPERTIES (A + B with 50% C):

Hardness, Shore OO ASTM D2240-04e1	10 ± 5
Density, (g/cc) ASTM D792-00	1.05
Color/Appearance.....	Colorless/Translucent
Tensile Strength, (psi) ASTM D412-98a (2002)e1	136
Elongation, (%) ASTM D412-98a (2002)e1	700
Tear Strength, (pli) ASTM D624-00e1 Die B	13
Shrinkage, (in/in) linear ASTM D2566-.....	Negligible

HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A	100 parts by weight
Part B	10 parts by weight

Specific Gravity:

Part A	1.09
Part B	0.99
Part C	0.97

Viscosity, (cps) @ 77°F (25°C) Brookfield:

Part A	28,000
Part B	55
Part C	95
Mixed.....	2,750

HANDLING PROPERTIES (continued):

Color:

Part A Colorless
Part B Colorless
Part C Colorless

Work Time (1 lb. mass) @ 77°F (25°C)..... 1.5-2 hours
Demold Time..... 16-24 hours

MIXING:

TC-5005 A/B is processed by adding curing agent "B" at a ratio of 10 parts by weight to 100 parts by weight of "A". Mix for 2 to 3 minutes in a clean container, then transfer material to another clean container and mix for another 2 to 3 minutes. The TC-5005 "C" component can be added as much as 50% to the total weight of TC-5005 A/B. This will increase the elongation and lower the amount of force needed to elongate the product. With the maximum amount of part "C" added a slight tack might be present on the surface of the part. By painting this surface with silicone paints or applying talc powder to the surface, this tack can be eliminated.

INHIBITION:

New molds made with tin catalyzed silicones often have a tendency to inhibit the cure of various urethane materials that are cast against the silicone. Post-curing a new mold at 150°F (66°C) for 24 hours will eliminate the cure inhibition problem in most cases. It is also recommended that the mold surface be washed thoroughly with soap and warm water then dried before use.

STORAGE:

Store in a cool dry place. Unopened containers will have a shelf life of 6 months from date of shipment when properly stored a room temperatures. Purge opened containers with dry nitrogen before re-sealing.

PACKAGING:

Gallon Kits.....8 lbs. A, 0.8 lbs. B, 4.4 lbs. C
5 Gallon Kits.....40 lbs. A, 4 lbs. B, 22 lbs. C
Drum Kits450 lbs. A, 45 lbs. B, 248 lbs. C

SAFETY PRECAUTIONS:

Use in a well-ventilated area. Avoid contact with skin using protective gloves and protective clothing. Repeated prolonged contact on the skin may cause an allergic reaction. Eye protection is extremely important. Always use approved safety glasses or goggles when handling this product.

IF CONTACT OCCURS:

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. It is *not* recommended to remove resin from skin with solvents. Solvents only increase contact and dry skin. Seek qualified medical attention if allergic reactions occur.

Eyes: Immediately flush with water for at least 15 minutes. Call a physician.

Ingestion: If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

Refer to the Material Safety Data Sheet before using this product.