



# TC-5050 A/B

## 50 SHORE A

### ROOM TEMPERATURE CURING SILICONE

#### PRODUCT DESCRIPTION:

TC-5050 A/B is a room temperature, addition/platinum curing silicone rubber designed for mold making, encapsulation applications, pressure pads, gaskets, and various types of parts. It is an excellent mold making material for casting low melting metals in continuous operations to 650°F (344°C) and sporadic applications of 850°F (454°C). It is also excellent for casting rigid fast to slow reacting liquid polyurethanes in. Several years of field reports show that TC-5050 A/B remains dimensionally correct maintaining a durable working surface even after large numbers of parts have been cast out of a single mold cavity. TC-5050 A/B molds have also proven to be stable and usable after years of storage.

#### PHYSICAL PROPERTIES:

Hardness, Shore A .....	50
Displacement, (cu. in./lb.).....	22.16
Color .....	Blue
Tensile Strength, (psi).....	750
Tear Strength, (pli).....	85
Elongation, (%).....	320
Coefficient of Thermal Expansion, (in./in./°F).....	$8.5 \times 10^{-5}$
Linear Shrinkage (in./in.).....	Nil

#### HANDLING PROPERTIES:

Mix Ratio (by weight):	
Part A.....	100 parts by weight
Part B.....	10 parts by weight
Specific Gravity (gm/cc):	
Part A.....	1.26
Part B.....	1.01
Mixed .....	1.25
Viscosity (cps) @ 77°F (25°C):	
Part A.....	130,000
Part B.....	400
Mixed .....	60,000
Work Life @ 77°F (25°C).....	25 minutes
Demold Time @ 77°F (25°C).....	24 hours
Heat Cure @ 150°F (66°C).....	2-4 hours

#### INHIBITION:

Certain materials will cause inhibition or neutralization of the curing agent. These materials are sulphur containing and organometallic salt containing compounds such as organic rubbers and many condensation cured RTV silicone rubbers. Inhibition may easily be determined by brushing a small quantity of TC-5050 over a localized area of the surface to be reproduced. If the TC-5050 is gummy or uncured after the curing time, then you know the mold surface is acting as an inhibitor. Molds made from wood, plaster, metal or plastic should not cause inhibition if they are clean. To insure against possible problems, it is advisable to spray a RF barrier film (BJB product RF-5124) over any questionable surfaces. This is the best way of treating clays and surfaces that cause inhibition.

**STORAGE:**

Store in a dry place at room temperature. Unopened containers of TC-5050 A/B will have a shelf life of 6 months when properly stored under temperature conditions of 75°± 15°F (24°± 10°C). Opened containers are best kept by purging with a dry gas blanket before closing.

**PACKAGING:**

Quart Kits ..... 2 lbs. A, 3.2 oz. B  
Gallon Kits ..... 8 lbs. A, 13 oz. B  
5 Gallon Kits .....40 lbs. A, 4 lbs. B  
Drum Kits .....450 lbs. A, 45 lbs. B

**SAFETY PRECAUTIONS**

Use in a well-ventilated area. Avoid contact with skin using protective gloves and protective clothing. Repeated or 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. 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.**