

# SILICONE CASTING RUBBERS

“Dedicated to *QUALITY, SERVICE, SAFETY, and INNOVATION*”

## TC-5040 A/B 40 SHORE A TRANSLUCENT SILICONE RUBBER

TC-5040 A/B is a room temperature, addition/platinum curing silicone rubber designed for mold making, encapsulation applications, pressure pads, gaskets, and various other types of parts. When this rubber is used to make certain types of molds, it is translucent enough to see through when casting into the mold cavity.

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Hardness, Shore A	ASTM D2240	40 ± 5
Density (g/cc)	ASTM D792	1.09
Cubic Inches per Pound	N/A	25.7
Color/Appearance	Visual	Colorless/Translucent
Tensile Strength (psi)	ASTM D412	865
Elongation (%)	ASTM D412	540
Tear Strength (pli)	ASTM D624 Die B	95
Shrinkage (in/in) linear	ASTM D2566 @ 1" depth	Nil
Coefficient of Thermal Expansion (in/in/°F)	ASTM831	TBD

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	100	10
Mix Ratio by volume	100	11
Specific Gravity @ 77°F (25°C)	1.09	0.99
Color	Colorless	Colorless
Viscosity (cps) @ 77°F (25°C) Brookfield	125,000	550
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	65,000	
Work Time, 100g mass @ 77°F (25°C)	40 – 45 minutes	
Gel Time	60 – 65 minutes	
Demold Time @ 77°F (25°C)	16 – 24 hours	

### **INHIBITION:**

Certain materials will cause inhibition or neutralization of the curing agent. These materials are sulphur and organometallic salt containing compounds such as organic rubbers and condensation cured RTV silicone rubbers. Inhibition may easily be determined by brushing a small quantity of TC-5040 A/B over a localized area of the surface to be reproduced. If the TC-5040 A/B 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 seal the surface with RF-5215 or other appropriate sealer.

**STORAGE:**

Store ambient temperatures, 65-80°F (18-27°C). Unopened containers will have a shelf life of 12 months from date of shipment when properly stored at recommended temperatures. Purge opened containers with dry nitrogen before re-sealing.

<b>PACKAGING</b>	<b>Part A</b>	<b>Part B</b>	<b>Cubic Inches per Kit</b>
Quart Kits	2 lbs.	3.2 oz.	57
Gallon Kits	8 lbs.	13 oz.	227
5-Gallon Kits	40 lbs.	4 lbs.	1,131
55-Gallon Drum Kits	450 lbs.	45 lbs.	12,722

**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. It is *not* recommended to remove resin from skin with solvents. Solvent 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.