

SILICONE CASTING RUBBERS

By BJB Enterprises. Inc. An ISO-9001 Certified company

TC-5030 A/B TRANSLUCENT SILICONE RUBBER

TC-5030 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. You can see through molds made from this material when casting into it.

PHYSICAL PROPERTIES	TEST METHOD	RESULTS	
Hardness, Shore A	ASTM D 2240-04e1	30 ± 5	
Density (g/cc)	ASTM D 792-00	1.08	
Cubic Inches per Pound	N/A	25.7	
Color/Appearance	Visual	Colorless/Translucent	
Tensile Strength (psi)	ASTM D 412-98a(2002)e1 700		
Elongation (%)	ASTM D 412-98a(2002)e1	400	
Tear Strength (pli)	ASTM D 624-00e1 Die B	65	
Coefficient of Thermal Expansion, (in/in/°F)	ASTM E 831 TBD		
Shrinkage (in/in) linear	ASTM D2566 @ 1" depth Nil		

HANDLING PROPERTIES	Part A	Part B	
Mix Ratio (by weight)	100	10	
Mix Ratio (by volume)	100	12	
Specific Gravity @ 77°F (25°C)	1.23	1.00	
Color	Colorless	Colorless	
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	45,000		
Work Time, 100g mass @ 77°F (25°C)	30 minutes		
Gel Time	75 minutes		
Demold Time @ 77°F (25°C)	24 hours		

Properties above are typical and not for specifications.

INHIBITION:

Certain materials will cause inhibition or neutralization of the curing agent. These materials include condensation/tin cured based silicone, lacquer and enamel coatings, polyester-based products, copper or copper containing metals, some SLA resins, and natural rubbers like latex. Inhibition may easily be determined by brushing a small quantity of TC-5030 A/B over a localized area of the surface to be reproduced. If the TC-5030 A/B is tacky or uncured after the cure time, then you know the mold surface is acting as an inhibitor. Molds made from wood, plaster, steel, aluminum, or plastic should not cause inhibition if they are clean. To insure against possible problems, it is advisable to spray a barrier film over any questionable surfaces. This is the best way of treating clays and other surfaces that cause inhibition. Contact BJB for recommended products.

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.

PACKAGING	Part A	Part B	Cubic Inches per Kit
Quart Kits	2 lbs.	3.2 oz.	57
Gallon Kits	8 lbs.	13 oz.	227
5-Gallon Kits	40 lbs.	4 lbs.	1131

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. 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.

NOTE:

Refer to the Safety Data Sheet before using this product. For processing tips and guides, please visit: <u>learn.bjbmaterials.com</u> to discover additional information.

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