

TC-5110 A/B

10 SHORE A TRANSLUCENT SILICONE RUBBER

TC-5110 A/B is a room temperature, addition/platinum curing silicone rubber designed for making molds and parts. Featuring exceptional tear strength, low viscosity, 1:1 mix ratio, and a quick demold time, this system is user friendly while producing high quality finished products. When used to make molds, the TC-5110 A/B is translucent enough to see through when casting into the mold cavity. For making parts, this system is easily pigmented with silicone pigments. This product has been successfully tested for skin safety and cytotoxicity by an independent lab (results are available upon request).

- High Tear Strength
- Medical Simulations
- Translucent/Easily Pigmented
- Props for Movie Special FX
- Cures at ambient temperatures
- Flexible Molds
- Tested for Skin Safety
- Tested for Cytotoxicity

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Hardness, Shore A	ASTM D 2240-04e1	10 ± 5
Density (g/cc)	ASTM D 792-00	1.109
Cubic Inches per Pound	N/A	25.1
Color/Appearance	Visual	Colorless/Translucent
Tensile Strength (psi)	ASTM D412-98a(2002)e1	600
Tensile Modulus (psi)	ASTM D412-98a(2002)e1	150
Elongation (%)	ASTM D412-98a(2002)e1	620
Tear Strength (pli)	ASTM D 624-00e1 Die B	135
Shrinkage (in/in) linear	ASTM D2566 @ 1" depth	Nil
Dielectric Constant, 1 MHz	ASTM D150-87	3.191
Dissipation Factor, 1 MHz	ASTM D150-87	0.0049

*Note: Reported physical properties are based on test specimens cured 48 hours at room temperature.

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	100	100
Mix Ratio by volume	100	100
Specific Gravity @ 77°F (25°C)	1.106	1.102
Color	Colorless	Colorless
Viscosity (cps) @ 77°F (25°C) Brookfield	4,600	3,600
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	2,500	
Work Time, 100g mass @ 77°F (25°C)	30 – 40 minutes	
Gel Time	50 – 60 minutes	
Demold Time @ 77°F (25°C)	2 – 3 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 3D Printing resins, and natural rubbers like latex. Inhibition may easily be determined by brushing a small quantity of TC-5110 A/B over a localized area of the surface to be reproduced. If the TC-5110 A/B is tacky or uncured after the cure time, then you know the mold surface is acting as an inhibitor. 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
Pint Kits	1 lb.	1 lb.	50
Quart Kits	2 lbs.	2 lbs.	100
Gallon Kits	8 lbs.	8 lbs.	402
5-Gallon Kits	40 lbs.	40 lbs.	2,008
55-Gallon Drum Kits	440 lbs.	440 lbs.	22,088

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.

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



Silicone Handling Guide

NON-WARRANTY "Except for a warranty that materials substantially comply with the data presented in Manufacturer's latest bulletin describing the product (the basis for this substantial compliance is to be determined by the standard quality control tests generally performed by Manufacturer), all materials are sold "AS IS" and without any warranty express or implied as to merchantability, fitness for a particular purpose, patent, trademark or copyright infringement, or as to any other matter. In no event shall Manufacturer's liability for damages exceed Manufacturer's sale price of the particular quantity with respect to which damages are claimed."

