

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		

Date: 05/25/2022

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. Contact BJB's technical sales for additional information.

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.	1,131

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.

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



Silicone Handling Guide

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