

TC-5024 A/B

25 SHORE A SILICONE ELASTOMER

TC-5024 A/B is a two-component, room temperature curing silicone elastomer. This system is designed primarily for making molds, but is also used for gaskets as well as a wide variety of parts. This product is a condensation cured system using a tin catalyst that provides a 30-minute work time with a 4-6 hour demold time.

- Excellent physical properties with high tear resistance
- Provides excellent detail reproduction
- Fast demolds
- Cures against various clays including "Roma"

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Hardness, Shore A	ASTM D2240-04e1	25 ± 5
Density (g/cc)	ASTM D792-00	1.21
Cubic Inches per Pound	N/A	23.2
Color/Appearance	Visual	Blue/Opaque
Tensile Strength (psi)	ASTM D412-98a(2002)e1	590
Tensile Modulus (psi) @ 100%	ASTM D412-98a(2002)e1	44
Tensile Modulus (psi) @ 200%	ASTM D412-98a(2002)e1	144
Tensile Modulus (psi) @ 300%	ASTM D412-98a(2002)e1	280
Elongation (%)	ASTM D412-98a(2002)e1	350
Tear Strength (pli)	ASTM D624-00e1 Die B	110
Shrinkage (in/in) linear	ASTM D2566 @ 1" depth	0.0025

Note: Reported physical properties are based on a 7 day room temperature cure.

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	100	10
Mix Ratio by volume	100	12
Specific Gravity @ 77°F (25°C)	1.22	1.00
Color	Off White	Blue
Viscosity (cps) @ 77°F (25°C) Brookfield	61,000	60
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	31,000	
Work Time, 100g mass @ 77°F (25°C)	30 – 40 minutes	
Gel Time	50 – 60 minutes	
Demold Time @ 77°F (25°C)	4 – 6 hours	

MIXING:

TC-5024 A/B is processed by adding curing agent "B" at a ratio of 10 parts by weight to 100 parts by weight of "A". TC-5024 "B" side is tinted blue so that when mixing the "A" and "B" sides together, the colorant in the "B" side will provide a visible means of insuring that a uniform mix is acquired. Mix for 2 to 3 minutes in a clean container, then transfer material to another clean container and mix for another 2 to 3 minutes.

INHIBITION:

New molds made with tin catalyzed silicones often have a tendency to inhibit the cure of softer elastomeric and aliphatic urethanes (Water Clear Series) that are cast against the silicone. Post curing a new mold at 150° F for 24 hours may reduce the cure inhibition problem in most cases. It is also recommended that the mold surface be washed thoroughly with soap and warm water then dried before use.

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.	51
Gallon Kits	8 lbs.	13 oz.	205
5-Gallon Kits	40 lbs.	4 lbs.	1,021

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.

⚠WARNING: This product can expose you to chemicals including Methanol (by product), which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.



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."