

## TECHNICAL DATA SHEET

# TCC-6060 A/B

## POLYURETHANE CASTING SYSTEM 60 SHORE D HARDNESS

### DESCRIPTION

TCC-6060 A/B is a two-component, room temperature cure, 60 Shore D hardness urethane elastomer. This shorter work life casting system offers outstanding performance properties including high impact strength, low shrinkage and easy processing. In many applications parts can be demolded several hours after casting. In complex parts or very thin sections, castings may require 9 – 16 hours before demolding; and in very demanding applications, an additional cure of 3 or 4 days at room temperature before use. The ultimate properties of this material are reached after 1 week at room temperature or by being post cured for 16 hours at 140°F (60°C).

### APPLICATIONS

- *Long Lasting Flexible Molds*
- *Industrial Wheels*
- *Drop Hammer Faces*
- *Washers*
- *Gaskets*
- *Foundry Patterns*
- *Core Box Linings*

### PHYSICAL PROPERTIES

Handling Properties @ 77°F (25°C)		
	Units	Mixed System
Mix Ratio (parts by weight)		100A/25B
Mixed Color	Visual	Amber
Mixed Viscosity	Cps	2,500
Pot Life (150 gram mass)	Minutes	12-15

<b>Typical Physical Properties @ 77°F (25°C)</b>		
	Units	Test Results
Specific Gravity - (cured)	g/cc	1.10
Hardness Build - (150 gram mass) 2 Hours 24 Hours 48 Hours 7 Days	Shore A	40 – 45 50 – 55 55 – 60 58 – 62
Glass Transition Temperature (Tg by DSC)	°F (°C)	140 (60)
Tensile Strength	psi (MPa)	4,000 (28)
Tensile Modulus	psi (MPa)	23,000 (159)
Elongation	%	200
Compressive Modulus	psi (MPa)	55,000 (379)
Notched Izod Impact Strength	ft-lbs/in	19.9
Linear Shrinkage	in/in	<0.001
Tear Strength - Split	pli	200
Tear Strength - Die "C" graves	pli	600

## MIXING PROCEDURE

Use an accurate gram scale to properly weigh and proportion A/B components into a straight sided metal or plastic container for mixing. Paper or wax lined mixing containers can contain moisture and contaminate material. Next, use a metal or plastic mixing spatula to gently but thoroughly blend resin and hardener together. Once the urethane appears to be well mixed, pour into a second container and continue to mix for another two to three minutes. This procedure eliminates the possibility of any unmixed material being poured into the final cast. Vacuum degass mixture before casting to produce an air free part.

## HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products:

- Ensure good ventilation.
- Wear gloves, glasses and protective clothes.

For further information, please consult the Safety Data Sheets.

## STORAGE CONDITIONS

- This product has a shelf life of 24 months for the resin and hardener as indicated by the expiration date on the container when stored in original unopened containers. Store closed containers at 65°F-85°F (18°C-29°). Partially used containers must be flushed with dry nitrogen and resealed. Materials are sensitive to moisture contamination.

## PACKAGING

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Packaging information on request, please contact your local sales representative or find your local contact on [www.sikaadvancedresins.us](http://www.sikaadvancedresins.us)

## LEGAL NOTICE

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## CONTACT

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