



# SKINFLEX III CASTABLE TRANSPARENT URETHANE ELASTOMER

## PRODUCT DESCRIPTION:

SkinFlex III can be used for a great variety of applications. The common uses for this product include the creation of soft yet, flexible and durable materials for animated characters, costumes, prosthetics, and various parts. But the true application of this material is only limited by your imagination.

The SkinFlex III product offers new dimensions in its ability to stretch and recover while maintaining high tear strength even in the soft to very soft hardness range. Additionally, advancements in surface texture and cure time allows the user to achieve realism in skin-like quality in a remarkable time frame. This system provides further control by allowing you to select the desired levels of stretch, recovery and hardness by modifying its mix ratio.

## PRODUCT HIGHLIGHTS:

- Basic "A" to "B" ratio is 50/100 parts by weight.
- With the addition of the "C" component, a softer and more stretchable skin can be achieved. Generally not more than 75% of "C" should be added to the total weight of "A" and "B".
- Castable and brushable versions of this system have been created for both open and closed mold applications.
- SkinFlex III parts are paintable with BJB's SC-89 Series Stretch Paint.
- Water resistant and reversion resistant under humid conditions.
- BJB pigments, which are compatible with all BJB products, can be added to this system. Normally 1 oz. of pigment will color approximately one gallon of material. In some cases, more pigment may be required; however, too much pigment can create curing problems.

## HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A ..... 50 parts by weight

Part B ..... 100 parts by weight

Specific Gravity (g/cc):

Part A ..... 1.06

Part B ..... 0.92

Part C ..... 0.97

Work Time @ 77°F (25°C)..... A+B (no "C") = 15 minutes

Gel Time ..... A+B (no "C") = 30 minutes

Demold Time @ 77°F (25°C)..... 16-24 hours

Demold times can be accelerated by heat curing the part up to 150°F (66°C). To speed up working time and gel time for faster demolds, pre-heat A, B, and C components before combining. Generally, 120°F (49°C) is the maximum pre-heat level. At this temperature, working time reduces to about 5-7 minutes and gel time to about 10-12 minutes.

**TYPICAL PHYSICAL PROPERTIES:**

	Combined Parts A & B (cured)	Combined Parts A & B w/70% C (cured)
Hardness Shore A	25	5
Tensile Strength (psi)	510	180
Tear Strength (pli)	36	17
Elongation (%)	930	820

**IMPORTANT NOTE:**

SkinFlex III may not cure properly when cast against tin catalyzed (condensation cured) silicone mold compounds. Request technical assistance if silicone molds are required. Polyurethane flexible mold materials are a good alternative to silicone. If you are going to paint SkinFlex III, or bond to the surface, avoid the use of silicone release agents.

**SkinFlex “B” side needs to be thoroughly mixed prior to combining with “A” and “C” components.**

**STORAGE:**

Store in a cool dry place. Unopened containers of SkinFlex III will have a shelf life of 6 months from the date of shipment when properly stored under normal indoor conditions, i.e., 75° ± 15°F (24° ± 10°C). Open containers of material should be purged with dry nitrogen prior to replacing lids or caps to prevent moisture contamination.

**PACKAGING:**

1 Gallon Kit ..... 3 lbs. A, 6 lbs. B, 7 lbs. C  
5 Gallon Kit ..... 16 lbs. A, 32 lbs. B, 36 lbs. C

**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.**