



# FLEX CAST – SA50N

## SA50N Datasheet

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### DESCRIPTION & APPLICATION:

Urethane ELASTOMER designed to be an easy to use, less expensive system for making virtually non-breakable products or wear resistant parts where friction is involved.

SA50N is a two-part liquid urethane cast resin in the family of our R1 FLEX CAST.

This resin is a strong, low viscosity, easy flow and mixing, 50/50 by volume resin. Suitable for making molds for casting cement steps or stonework, flexible spacers, decorative moldings, gift and novelty items, shock absorption parts, etc. Final part is flexible with excellent detail.

Important quality control instructions. The A component freezes below 60° F. In order to re-liquefy, it must be heated up to 105° F. Premix each side prior to using because separation occurs when the temperature drops below 65°F. If the temperature does drop below 65°F. heat the resins to 100°F. and thoroughly mix each side before dispensing. For drum storage, maintain temperature at 75°F., keep drums off cold cement floor and onto plywood. Mix the resin once a week because slow separation will still occur. After measuring out equal amounts of 'A' and 'B', mix them together for 2 minutes with a Jiffy Mixer (hand mixing not recommended). *Use a heat lamp on the mold to bring the temperature up to at least 100°F (preferably 140-150°F) prior to pouring the resin and curing in the mold until tack free.* Following these points are strongly advised if you want a good cast part. Our **SA90N** is much stronger and more rigid than the SA50N. Moisture contamination can be a problem. We recommend you stock our **Molecular Sieves** and for drum users, apply a nitrogen blanket. When using SA50N as a mold for casting cement steps, use our **SP Mold Release** over the pattern and use linseed oil as a mold release for the cement casting. *Do not* use wax because it reacts with the Flex Cast.

**NOTE:** Below freezing temperatures will make the casting more brittle and subject to fracturing on hard impact. Always read the Safety Data Sheet and the container labels prior to use.

Available in 2 quart kits, 2 gallon kits, 10 gallon kits and 55 gallon 2 drum kits.

### PHYSICAL PROPERTIES:

**SIDE A:** EXTENDED POLYURETHANE ISOCYANATE

**SIDE B:** EXTENDED POLYETHER POLYOL

**GEL TIME:** adjustable from 4 to 7 minutes.

**DEMOLD TIME:** 20 to 30 minutes depending on gel time, size, thickness and temperature.

**VISCOSITY A/B:** A: 350 B: 150 cps

**SPECIFIC GRAVITY A/B:** A: 1.10 @ 20°C. B: 1.02 @ 20°C.

**MIX RATIO BY VOLUME:** 50/50 (By weight: A: 51.8 B: 48.2)

**BARCOL HARDNESS/SHORE D:** 50

**EXOTHERM TEMP CAN REACH** 200° F.

**SPLIT TEAR:** 20 psi

**TENSILE STRENGTH (D-638):** 1000 psi

**ULTIMATE ELONGATION (D-638):** 350%

**SHRINKAGE:** (pre-heated mold) 2% (unheated mold) 4% (estimated values)

**TEAR RESISTANCE/DIE-C (D-624):** 60 psi

**COLOR:** Off white to clear when resin and mold are warmed, White when resin and molds are cold

**Questions? Please contact Goldenwest Manufacturing, Inc.**

**(530) 272-1133 or email [sales@goldenwestmfg.com](mailto:sales@goldenwestmfg.com)**

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