

Technical Data Sheet

Sikaflex®-291
Fast Cure Marine Adhesive and Sealant

Properties:

Density	10.3 lbs/gal
Tack free time*	60 minutes
Rate of cure	1/4-in x 1/4-in bead 9 days @ 40°F/30% R.H. 1/4-in x 1/4-in bead 4 days @ 73°F/50% R.H. 1/4-in x 1/4-in bead 3 days @ 73°F/70% R.H. 1/4-in x 1/4-in bead 1 day @ 100°F/75% R.H.
Shore A hardness (ASTM D4420)	45 to 50
Elongation at break (ASTM D412)	600%
Tensile strength (ASTM D412)	225 psi
Lap shear strength (ASTM D1002)	165 psi
Peel strength	35 lbs/in on fiberglass 25 lbs/in on gelcoat
Application temperature**	40°F to 110°F
Service range	-40°F to 190°F
Colors	White and black

*temperature 73°F/50% R.H.

**refers to ambient temperature of substrates For optimum application, Sikaflex®-291 should be conditioned to 70°-80°F before use.

Description:

Sikaflex®-291 is a 1-component, marine grade polyurethane elastomeric adhesive and sealant. Used by many boat builders, its fast cure time makes it ideal for applications where speed is important.

Where to Use:

- General all-purpose sealant
- May be used for light duty bonding

Storage:

Sikaflex®-291 should not be stored at temperatures in excess of 75°F. Properly stored in cool, dry conditions, the unopened cartridges and uni-pacs have a shelf life of 12 months and unopened pails and drums have a shelf life of 6 months.

Advantages Offered by Sikaflex®-291:

- Use above and below water line
- Resists salt water
- Fast strength build-up
- Excellent adhesion to gelcoat, fiberglass, metal and wood
- May be squeezed or brushed into place
- Stable
- Paintable
- Versatile packaging
- Excellent bond
- Fast tack-free time
- High solids content
- Sandable
- NSF approved for potable water (black and white only)
- USDA approved for incidental food contact.

Chemical Resistance:

Sikaflex®-291 has very good long term resistance to fresh water, sea water, aqueous cleaning agents, weak acids and weak bases and to most teak oils. Brief contact with fuels and lubricants has no significant effect. It is recommended to test on a small area first to ensure compatibility. Sikaflex®-291 has very reduced resistance to solvents, concentrated acids and bases and caustic solutions.

Coverage:

- * 10.3-fl-oz cartridge yields 96 lineal feet of 1/8-in x 1/8-in bead
- * 10.3-fl-oz cartridge yields 24 lineal feet of 1/4-in x 1/4-in bead

Packaging:

- * 10.3-fl-oz cartridges packaged 12 per carton
- * 20-fl-oz Unipacs packaged 20 per carton
- * 4.5 gallon pails (special order)
- * 50-gallon drums (special order)

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HOW TO USE:

Substrate:

Clean, dry, free of oil and grease, and of sound quality. Thoroughly remove all loose particles such as residues of color, splashes, etc. Clean surface with a strong jet of compressed air, sandblast, solvent.

Priming:

Pretest substrates for adhesion. Cleaners and/or primers may be required to achieve optimal adhesion. Please refer to the Surface Preparation Guidelines for specific application information.

Application:

Recommended application temperatures: 40°F to 110°F. For cold-weather application, store units at approximately 70°F; remove just prior to using. Make sure joint is frost-free. Cut tip of plastic nozzle to joint size. Puncture airtight seal. Install with hand- or power-operated caulking gun. For best performance, Sikaflex®-291 should be gunned into joint when joint slot is mid-point of its designed expansion and contraction. To facilitate tooling, wet pointing tool or finger with soap solution.

Limitations:

- Do not apply on frozen surface or

through standing water.

- Do not apply over silicones or in the presence of curing silicones.
- Avoid contact with alcohol and alcohol-containing solvents during cure.
- Allow minimum of 1 week full cure prior to total water immersion situations.
- Maximum chlorine exposure 2.5 ppm.
- Do not use as a deck seam sealant.

Important Considerations:

When applying sealant, avoid air entrapment. Protect from action of water during curing period.

CAUTION:

Irritant; Sensitizer:

Contains polyisocyanate pre-polymer, xylene. May cause skin/eye/respiratory irritation. May cause skin and/or respiratory sensitization after prolonged or repeated contact. Avoid contact. Xylene may cause headaches, dizziness or other CNS effects; and may cause liver or kidney effects. Use only with adequate ventilation. Use of safety goggles and chemical resistant gloves is recommended. In case of exceedance of PELs,

use an appropriate, properly fitted NIOSH/MSHA approved respirator. Remove contaminated clothing.

First Aid:

In case of skin contact, wash immediately and thoroughly with soap and water. If symptoms persist, consult physician. For eye contact, flush immediately with plenty of water for at least 15 minutes, contact a physician. For respiratory problems, remove person to fresh air; if symptoms persist, contact a physician. In case of ingestion, dilute with water and consult physician. Remove contaminated clothing.

Clean Up:

Uncured sealant may be removed with solvent. Cured sealant is only removed mechanically. In case of spills or leaks, wear suitable protective equipment, contain spill, collect with absorbent material and transfer to suitable container. Ventilate area. Avoid contact. Dispose of in accordance with current, applicable local, state, and federal regulations.

IN CASE OF EMERGENCY CALL CHEMTREC, 1-800-424-9300

Consult Material Safety Data Sheets and Surface Preparation Guidelines available through SikaFax: 877-663-9727

Visit our website at <http://www.sikasolutions.com>

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KEEP OUT OF REACH OF CHILDREN

NOT FOR INTERNAL CONSUMPTION

CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION

KEEP CONTAINER TIGHTLY CLOSED

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Sika Corporation
30800 Stephenson Highway
Madison Heights, MI 48071
(248) 577-0020
Fax (248) 577-0810

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