

Product Data Sheet

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 Identification no. 481
 Sikaflex-11 FC

Sikaflex®-11 FC

One part advanced polyurethane,
 elastomeric sealant/adhesive

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| Description | Sikaflex-11 FC is a one-component, gun-grade, adhesive and sealing compound of permanent elasticity. This dual-purpose material is based on a special moisture-cured polyurethane with an accelerated curing time. |
| Where to Use | <p>As an elastic adhesive for:</p> <ul style="list-style-type: none"> ■ Cover plates, gaskets and coverings. ■ Acoustic ceiling tiles. ■ Floor moldings and door sills. ■ Light weight construction materials. ■ Wood or metal and door frames. ■ Roof tiles. <p>As an elastic joint sealer for:</p> <ul style="list-style-type: none"> ■ Air ducts and high vacuum systems. ■ Containers, tanks, and silos. ■ Gaskets in openings in walls or floors for ducts, piling, etc. ■ Reservoirs or water retaining structures. ■ Aluminum fabrication. ■ Bolted lap joints. |
| Advantages | <ul style="list-style-type: none"> ■ Excellent adhesion on all cement-based materials, brick, ceramics, glass, metals, wood, epoxy, polyester and acrylic resin. ■ Fast cure rate. ■ Good weathering and water resistance. ■ Non-corrosive. ■ Can be painted over with water, oil, and rubber-based paints. (Preliminary tests recommended). ■ High durability. |
| Coverage | 10.1 fl. oz. cartridge seals 12.4 lineal ft. of 1/2 x 1/4 in. joint. |
| Packaging | Disposable 10.1 fl. oz., moisture-proof composite cartridges, 12/case. |

Typical Data (Material and curing conditions @ 73°F and 50% R.H.)

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| Shelf Life | 12 months in unopened container. |
| Storage Conditions | Store at 40°-95°F (4°-35°C). Condition material to 65°-75°F before using. |
| Color | White |
| Application Temperature | 40° to 100°F. Sealant should be installed when joint is at mid-range of its anticipated movement. |
| Service Range | -40° to 170°F |
| Curing Rate | Tack-free Time (TT-S-00230C) 1 to 2 hours depending on climate. Final Cure 3 to 5 days |
| Recovery | ASTM C-719 >90% |
| Shore A Hardness (ASTM D-2240) | 40-45 |
| Tensile Properties (ASTM D-412) | |
| Tensile Stress | 225 psi |
| Elongation at Break | 600% |
| Lap-Shear Strength (ASTM D-1002) modified, glass substrate | |
| 73 F/50% RH | 165 psi |
| Weathering Resistance | Excellent |
| Chemical Resistance | Good resistance to water, weak acids, weak alkalis, sewerage, mineral oils, vegetable oils, fats, fuels,. (Not resistant to organic solvents, paint thinner, strong acids, strong alkalis). Consult Technical Service for specific data. |

How to Use

Surface Preparation Clean all surfaces. Joint walls must be sound, clean, dry, frost-free, and free of oil and grease. Curing compound residues and any other foreign matter must be thoroughly removed. A roughened surface will also enhance bond.



Priming

Priming is not usually necessary for anodized aluminum, steel, non-absorbent materials such as glass, ceramics, stoneware and tiles. Most substrates only require priming if testing indicates a need or where sealant will be subjected to water immersion after cure. Consult Technical Service for additional information on priming.

Application

Recommended application temperatures: 40°-100°F. For cold weather application, condition material to 65°-75°F before using.

Place nozzle of gun into bottom of the joint and fill entire joint. Keep the nozzle in the sealant; continue on with a steady flow of sealant preceding the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air. Tool as required. Joint dimension should allow for 1/4 inch minimum and 1/2 inch maximum thickness for sealant. Proper design is 2:1 width to depth ratio.

Linear Feet of Sealant per Gallon

| Width | Depth | |
|-------|--------|------|
| | Inches | |
| 1/4 | 308.0 | |
| 1/2 | 154.0 | 77.0 |
| 3/4 | 102.7 | 51.3 |
| 1 | 77.0 | 38.5 |
| 1 1/2 | 61.6 | 30.8 |
| 1 3/4 | 51.3 | 25.7 |

Storage

Store in dry warehouse conditions between 40°F and 80°F. Shelf life under these conditions is 12 months.

Limitations

- Allow 5 day cure at standard conditions when using Sikaflex-11 FC in total water immersion situations and prior to painting.
- Avoid exposure to high levels of chlorine. (Maximum level is 5ppm).
- Maximum depth of sealant must not exceed 1/2 in.; minimum depth is 1/4 in.
- Maximum expansion and contraction should not exceed 12.5% of average joint width.
- Avoid contact with alcohol and other solvent cleaners during cure.
- Do not apply when moisture-vapor-transmission condition exists from the substrate as this can cause bubbling within the sealant.
- Use opened cartridges the same day.
- When applying sealant, avoid air-entrapment.
- Since system is moisture-cured, permit sufficient exposure to air.
- White color tends to yellow slightly when exposed to ultraviolet rays.
- The ultimate performance of Sikaflex-11 FC depends on proper application, good design and proper preparation of joint surfaces.
- Not for use in expansion joints.
- Heavier substrates may require additional support during the cure period.
- Do not use in contact with bituminous/asphaltic materials.

Caution

Combustible: Keep away from open flames and high heat. Contains xylene; avoid breathing vapors. Use with adequate ventilation.

Irritant; Sensitizer - Contains polyisocyanate prepolymer, xylene. Avoid breathing vapors. Use with adequate ventilation. May cause skin/eye/respiratory irritation. May cause skin and/or respiratory sensitization after prolonged or repeated contact. Avoid contact. Overexposure to xylene may cause headaches, dizziness or other CNS effects. Use only with adequate ventilation. Use of safety goggles and chemical resistant gloves is recommended. If PELs are exceeded, use an appropriate, properly fitted NIOSH 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 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

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**

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