

# Sikaflex®-11 FC

## PRODUCT DESCRIPTION

Sikaflex®-11 FC is a one-part, gun-applied polyurethane adhesive and sealant with permanent elasticity. It combines the performance of a structural adhesive with the flexibility of a high-grade sealant, making it ideal for both bonding and sealing applications.

Formulated using advanced moisture-curing polyurethane, Sikaflex®-11 FC cures rapidly to form a durable, elastomeric material. It is designed for a wide range of construction and civil engineering applications, meeting ASTM C920 Type S, Grade NS, Class 12.5 and Federal Specification TT-S-00230C, Type II, Class B. The product is also certified to NSF/ANSI/CAN 61, making it suitable for potable water systems.



## FEATURES & BENEFITS

- Dual-purpose: adhesive and sealant in one
- Excellent adhesion to concrete, brick, masonry, metals, glass, ceramics, and wood
- Fast curing with durable long-term elasticity.
- Resistant to weathering, water, weak acids, weak alkalis, mineral oils, fuels, and fats
- Non-corrosive and paintable (compatibility testing recommended)
- High elastic recovery (>90%) and elongation at break (600%)
- Suitable for potable water contact (NSF/ANSI/CAN 61 compliant)

## APPLICATIONS

Sikaflex®-11 FC is suitable for use as:

- Elastic adhesive for:
  - Cover plates, gaskets, and coverings
  - Acoustic ceiling tiles
  - Floor mouldings and door sills
  - Lightweight construction materials
  - Wood or metal frames
  - Roof tiles
- Elastic joint sealant for:
  - Air ducts and high-vacuum systems
  - Tanks, silos, and containers
  - Gaskets for ducts, piles, and wall penetrations
  - Reservoirs and water-retaining structures
  - Aluminium fabrications
  - Bolted lap joints

## STANDARDS COMPLIANCE

- ASTM C920 Type S, Grade NS, Class 12.5, Use NT, I, M, A, O
- Federal Specification TT-S-00230C, Type II, Class B
- NSF/ANSI/CAN 61 certified for potable water
- Meets VOC compliance: 25 g/L

## DESIGN CRITERIA

- Recommended joint width: 5 mm – 50 mm
- Minimum depth: 1/4 inch (6 mm)
- Maximum depth: 1/2 inch (12 mm)
- Width-to-depth ratio: 2:1 for joints >20 mm wide
- Maximum movement: ±12.5% of joint width

## SPECIFICATION

SKU	Product Description
102035	Sikaflex 11FC Grey 600ml

## TECHNICAL SPECIFICATIONS

### TYPICAL PERFORMANCE DATA

Property (ASTM)	Requirement / Value	Test Result / Notes
Form	Paste	-
Colour	White, Aluminium Grey, Black	-
Density	~1.28 g/cm <sup>3</sup> @ 23 °C	-
Hardness (D-2240)	40–45 Shore A	-
Tensile Strength (D-412)	225 psi	-
Elongation at Break (D-412)	> 600%	600%
Elastic Recovery (C-719)	> 90%	> 90%
Lap Shear Strength (D-1002, modified)	165 psi (glass substrate)	-
Tack-Free Time	1–2 hours (climate dependent)	-
Full Cure	3–5 days	-
Service Temperature	-40 °C to +77 °C	-
VOC Content	25 g/L	-
Resistance to Weathering (C-793)	Excellent	-
Chemical Resistance	Resistant to water, weak acids/alkalis, mineral/vegetable oils, fats, fuels; not resistant to solvents, thinners, strong acids/alkalis	-

## CHEMICAL RESISTANCE

- Resistant to: water, weak acids, weak alkalis, sewerage, mineral oils, vegetable oils, fats, fuels
- Not resistant to: organic solvents, paint thinners, strong acids, strong alkalis
- Contact Danterr Technical Team for detailed compatibility advice

## APPLICATION INSTRUCTIONS

### JOINT PREPARATION

- Surfaces must be clean, dry, and free from dust, grease, oil, curing agents, and contaminants
- For optimal adhesion, roughen smooth surfaces
- Use a backer rod or bond breaker tape to prevent three-sided adhesion

### PRIMING

- Generally not required for non-porous substrates
- Required for water immersion and chemical exposure applications (consult Danterr Technical Team)

### APPLICATION

- Apply between +5 °C and +35 °C
- Insert backer rod, then gun Sikaflex®-11 FC into the joint
- Avoid air entrapment
- Tool immediately using a smooth convex tool

### OVER-PAINTING

- Allow at least 5 days curing prior to painting
- Compatibility and adhesion testing with paint is essential
- Avoid solvent- and alcohol-based coatings

### CLEANING

- Clean uncured product with a suitable solvent
- Once cured, remove mechanically

### COVERAGE (600 ML SAUSAGE)

Width / Depth	1/4"	3/8"	1/2"
1/4"	24.3 m	-	-
3/8"	16.2 m	10.8 m	-
1/2"	12.1 m	8.1 m	6.1 m
3/4"	8.1 m	5.4 m	4.0 m
1"	-	-	3.0 m
1.25"	-	-	2.4 m
1.5"	-	-	2.0 m

**COVERAGE WILL VARY DEPENDING ON JOINT DIMENSIONS, SUBSTRATE CONDITIONS, AND APPLICATION METHOD.**

### SHELF LIFE & STORAGE

- Shelf life: 12 months (cartridges/sausages), 6 months (pail) in unopened packaging
- Store between +4 °C and +35 °C in a dry, well-ventilated environment
- Protect from sunlight, frost, and moisture

## SAFETY INFORMATION

### CLASSIFICATION

Hazardous (OSHA HCS, GHS 7)

### GHS HAZARD CLASS

- **Hazard Categories:**
  - Respiratory sensitisation – Category 1
  - Skin sensitisation – Category 1
  - Carcinogenicity (inhalation) – Category 1A
  - Specific target organ toxicity (repeated exposure, inhalation) – Category 2
- **Signal Word:** Danger
- **Hazard Statements:**
  - H317 – May cause an allergic skin reaction
  - H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled
  - H350 – May cause cancer by inhalation
  - H373 – May cause damage to organs through prolonged/repeated exposure if inhaled

### PRECAUTIONARY STATEMENTS

- Avoid breathing mist or vapours
- Wear gloves, protective clothing, and respiratory protection
- Wash hands after handling
- Store locked up

**⚠ WARNING: INTENTIONAL MISUSE BY INHALING VAPOURS MAY BE HARMFUL OR FATAL.**

### FIRST AID MEASURES

- **Inhalation:** Move to fresh air; seek medical advice if symptoms persist
- **Skin Contact:** Remove contaminated clothing, wash thoroughly with soap and water
- **Eye Contact:** Rinse with water for several minutes; seek medical advice if irritation persists
- **Ingestion:** Rinse mouth with water; do not induce vomiting; seek medical advice

### FIRE FIGHTING MEASURES

- Suitable media: water spray, alcohol-resistant foam, dry chemical, CO<sub>2</sub>
- Hazards: may emit toxic fumes if burning
- Protection: firefighters should wear self-contained breathing apparatus (SCBA)

### ACCIDENTAL RELEASE MEASURES

- Small spills: absorb with sand, sawdust, or inert material
- Large spills: contain and collect in sealed containers
- Do not allow into drains or waterways

## TOXICOLOGICAL INFORMATION

- May cause skin sensitisation and respiratory irritation
- Prolonged exposure to dust from cured product (sanding, cutting, grinding) may cause cancer (contains crystalline silica)
- Not mutagenic or reprotoxic

## EXPOSURE CONTROLS / PPE

- Ensure adequate ventilation
- **Respiratory Protection:** NIOSH-approved air-purifying respirator if ventilation inadequate
- **Hand Protection:** Nitrile gloves
- **Eye Protection:** Safety glasses with side shields
- **Skin Protection:** Protective overalls and footwear

## ECOLOGICAL INFORMATION

- Avoid release to drains and waterways
- Not readily biodegradable
- Not classified as acutely or chronically toxic to aquatic life

## DISPOSAL CONSIDERATIONS

- Dispose of product and packaging via licensed waste contractor
- Do not release into sewers or landfill
- Recycle packaging where possible

## TRANSPORT INFORMATION

- Not classified as dangerous goods under IATA, IMDG, or ADR transport regulations

## REGULATORY INFORMATION

- All substances are listed on/exempt from AICS (Australia)
- Complies with international chemical inventories