

UNITY
RELIANCE

Expansion Joint
System

UNISTICK

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UNISTICK CA

SOLVENT BASED CONTACT ADHESIVE



Product Features

UNISTICK CA is an extra-strong, rapid-setting contact adhesive engineered for high-performance bonding across a wide variety of construction, industrial and repair applications. It gives immediate initial grab and high bond strength, and forms a tough, permanent and flexible bond line.

UNISTICK CA is specifically designed for securing elastomeric and joint accessories such as **cork, closed-cell polyethylene, and butyl rubber directly onto concrete and masonry surfaces.** In addition, its versatile multi-substrate adhesion allows for instant surface bonding across diverse materials, including wood, hardboard, metals, rubber, rigid plastics, decorative laminates, and leather.

Advantages

- Extra-Strong Initial Grab & High Ultimate Bond Strength
- Rapid-Drying Formula for Fast Installation
- Ready To Use, No Mixing Required
- Multi-Substrate Versatility Across Porous & Non-Porous Surfaces
- Tough, Durable & Flexible Adhesive Film

Fields Of Application

- Cork, Closed-Cell Polyethylene & Butyl Rubber to Concrete Substrates
- General Construction & Site Maintenance Repairs
- Laminates, Timber, Hardboard & Decorative Woodwork Fabrication
- Metal-to-Concrete & Metal-to-Masonry Assembly
- Industrial Rubber, Rigid Plastics & Synthetic Sheeting Attachment

Compatible Products

- UNIFLEX® PE and RBCF filler boards, to fix the board before the second pour
- UNIFLEX® PE Slip Membrane, to bond the membrane to the bearing surface
- UNISWELL® SW10, SW20 and SW47 waterstops, to bond the strip to the concrete

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Technical Properties

Property	Unit Measurement	Result
Density	g/ml	0.83 - 0.86
Viscosity	mPa·s	3000 - 4000
Total Solid	%	24.0 ± 1
Tack Life	minutes	5 - 30

Tack life depends on the porosity of the surfaces.

Physical Properties

Material	:	Synthetic elastomer / Resin in organic solvents
Colour	:	Yellowish to light brown
Physical Appearance	:	Viscous Liquid
Packing	:	1 Litre / Tin

Health & Safety

The solvents in this product are **highly flammable**. Use only in a well-ventilated area and keep away from open flame, heat, sparks, ignition sources, hot work and static discharge. This hazard applies while the adhesive is wet, because of the solvent carrier; **the adhesive is non-flammable once it has cured**. For handling, first aid, spillage and disposal, refer to the Safety Data Sheet for **UNISTICK CA**.

Shelf Life & Storage

Keep the lid tightly closed after use and store in a cool, dry, well-ventilated area away from heat and sparks. Shelf life is up to **12 months** in the unopened tin when stored as recommended.

Cleaning

Remove wet **UNISTICK CA** from tools and surfaces with acetone before it sets. Solvents in the adhesive or in acetone can damage some surfaces, so test on a small area first. Cured adhesive can only be removed mechanically.

This technical data sheet is given in good faith and does not guarantee the application work.
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It is the user's responsibility to obtain the latest version of the information required.

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Installation Procedures

1 Preparation | 2 Application | 3 Fixing

Step 1
PREPARATION

Make sure the surfaces to be bonded are smooth, clean and dry, free from dust, dirt, oil, grease, organic growth and release agents.

Step 2
APPLICATION

Open the tin and **brush or spread the adhesive evenly** over both surfaces.

Leave the coated surfaces until the adhesive is just tacky, approximately **5 - 30 minutes** depending on the conditions and surface porosity.

Ensure the surfaces are accurately aligned and then **press firmly** together. They will stick immediately, so position carefully. **Close the lid tightly** after use.

Step 3
FIXING ACCESSORIES

UNIFLEX® PE / RBCF filler board: spot-bond the board to the hardened joint face of the first pour, full slab depth, so that it stays in place while the second pour is placed.

UNIFLEX® PE Slip Membrane: apply **UNISTICK CA** to the bearing surface and to one face of the membrane. When touch-dry, position the membrane and roll it firmly for full contact.

UNISWELL® SW10 / SW20 / SW47: brush a continuous band of **UNISTICK CA** about 30 mm wide along the line of the waterstop, plus a thin coat on the bonding face of the strip. After 5 - 30 minutes press the strip firmly into place. Cast the second pour only when the adhesive has dried. One litre covers approximately **20 - 30 m** of strip.

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UNISTICK EA 5537

FLOWABLE EPOXY ADHESIVE GROUT



Product Features

UNISTICK EA 5537 is a high-performance, flowable two-component epoxy adhesive grout. It bonds to concrete and to a wide range of substrates, including metal, wood, ceramic, rigid plastic and polyethylene filler board.

It is the bonding adhesive for **UNIFIX® TPE** and **TPE-FELT** expansion joint tapes and for **UNIJOINT® FLEXSEAL** joint seals, and, being flowable and self-levelling, it is also used for tile grouting and for sealing cracks in concrete slabs.

Advantages

- Flowable And Self-Levelling, Fills Small Cracks And Gaps
- Bonds To Concrete, Metal, Wood, Ceramic, Rigid Plastic And PE Board
- High Solid Content (98%), Low VOC Emissions
- Touch Dry In About 3 Hours At 28°C
- Bond To Concrete Stronger Than The Concrete (Concrete Failure)

Fields of Application

- Bonding UNIFIX® TPE and TPE-FELT joint tapes to concrete
- Bonding UNIJOINT® FLEXSEAL expansion joint seals to the joint faces
- Sealing cracks in concrete slabs, floors and tanks; anchoring bolts
- Grouting tiles with joints of 1 - 10 mm on horizontal surfaces

Compatible Products

- UNIFIX® TPE and TPE-FELT expansion joint tapes, bonded along both joint edges
- UNIJOINT® FLEXSEAL expansion joint seals, bonded to both joint faces

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Technical Properties

Property	Unit Measurement	Result
Tensile Strength	N/mm^2	20
Compressive Strength	N/mm^2	52
Elongation at Break	%	3.0
Bond Strength to Concrete	-	Concrete Failure

Physical Properties

Material	:	Epoxy Based Adhesive
Colour	:	Buff
Physical Appearance	:	Viscous Liquid
Number of Component	:	2
Mixing Ratio (by weight)	:	Part A: 3.4 kg Part B: 1.6 kg
Pot Life @ 28°C	:	30 minutes (100 g mass)
Touch Dry Time @ 28°C	:	3 hours
Cleaning Agent	:	Xylene or MEK Solvent
Flash Point	:	Part A: 100°C | Part B: 160°C
Packing Size	:	5 kg per set (Part A + Part B)

Health & Safety

UNISTICK EA 5537 is an epoxy adhesive. Wear gloves and goggles, avoid contact with skin and eyes, and use in a well-ventilated area. For handling, first aid, spillage and disposal, refer to the Safety Data Sheet for **UNISTICK EA 5537**.

Shelf Life & Storage

Store **UNISTICK EA 5537** at or below **30°C**, away from direct sunlight and rain, and keep the containers sealed until ready for use. Shelf life is **12 months** from the shipment date when stored indoors as recommended.

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UNISTICK EA 5537

Installation Procedures

1 Preparation | 2 Mixing | 3 Application | 4 Cleaning

Step 1
SURFACE PREPARATION

Make sure the surfaces to be bonded are clean and dry, free from dust, dirt, oil and grease.

Step 2
MIXING

Combine both components in the correct ratio (**3.4 : 1.6** by weight).

Mix thoroughly until the mixture achieves a uniform colour.

Mix only as much as can be used within the pot life: all mixed material must be used up before it starts to set.

Step 3
APPLICATION

Apply the mixed adhesive to the bonding area with a trowel or spatula and work it well into the substrate. Keep the bonded parts in firm contact, clamped where needed, until handling strength is reached; then keep loading to a minimum until full bond strength develops.

UNIFIX® TPE / TPE-FELT tape: apply about **1.0 – 1.5 mm** on both edges of the joint, 40 - 50 mm wide on each side, lay the tape onto the adhesive and roller it down, then apply a second 1.0 - 1.5 mm layer over the tape edges, overlapping the edge by at least **20 mm**.

UNIJOINT® FLEXSEAL: apply an even coat to both joint faces over the full depth of the seal and to both sides of the seal, then press the seal in flush with the surface within the working time. Remove excess adhesive before it cures.

Full performance develops after curing for approximately **5 days at 28°C**; protect from water and loading until then. Curing can be accelerated by heating up to 80°C (small masses only).

Step 4
CLEANING

Clean tools and equipment with xylene or MEK solvent before the adhesive cures. Cured adhesive can only be removed mechanically.

Important Notes

- Apply all mixed material within its specified pot life to avoid premature hardening.
- Apply between 10°C and 35°C, avoiding direct sunlight. Note that temperatures above 30°C significantly shorten working time.
- Ensure surfaces are completely dry; do not apply on damp, wet, or moisture-laden substrates.
- Do not attempt to thin the material with solvents.

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UNISTICK EA 1015

TWO COMPONENT EPOXY ADHESIVE



Product Features

UNISTICK EA 1015 is a two-component, epoxy resin-based adhesive system designed for application on **dry and damp substrates**. It is ideal for **jointing precast components**, particularly in segmental bridge construction, steel plate bonding, and other uses requiring high-performance adhesion. The material adheres effectively to concrete, steel, glass, wood, and rubber. Once fully cured, it resists various chemicals and solvents. It processes easily under standard ambient temperature and atmospheric pressure conditions.

UNISTICK EA 1015 consists of two components (resin & hardener):

UNISTICK EA 1015-A - Formulated epoxy resin
UNISTICK EA 1015-B - Formulated hardener

Advantages

- Suitable For Dry And Damp Surfaces
- Bond To Concrete Stronger Than The Concrete (Concrete Failure)
- Low Water Absorption, Resists Chemicals And Solvents When Cured
- Tested For Segmental Bridge Joints (FIP)

Fields of Application

- Jointing of precast elements, including segmental bridge construction
- Applications requiring high-strength adhesion across concrete, steel, glass, wood, and rubber substrates
- Steel plate bonding

Physical Properties

Component	Colour	Viscosity (25°C)	Density
EA 1015-A (resin)	Sandy beige	60,000 - 120,000 mPa·s	1.70 - 1.80 g/cm³
EA 1015-B (hardener)	Black	50,000 - 100,000 mPa·s	1.65 - 1.75 g/cm³
EA 1015-A/B (mixed)	Grey	Paste	Approx. 1.70 g/cm³

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UNISTICK EA 1015

Technical Properties

Property	Test Method	Unit	Result
Hardness	ASTM D2240	Shore D	Approx. 90
Sag Flow	ASTM D4400	mm	Does not flow
Tensile Shear Strength	ASTM D1002	N/mm²	Approx. 18
Tensile Strength	ASTM D638	N/mm²	> 30
Compressive Strength (7 days)	ASTM C579	N/mm²	> 85
Flexural Strength	FIP	N/mm²	> 40
Slant Shear Bond to Concrete	FIP	-	Concrete failure
Glass Transition Temp. (Tg)	ISO 11357-2	°C	Approx. 40
Heat Deflection Temperature	FIP	°C	> 50
Shrinkage	FIP	%	< 0.05
Water Absorption (14 d, 60°C)	FIP 9/2	%	≤ 0.5
Open Time	FIP	minutes	> 75

Tested for segmental bridge construction (FIP). All values are subject to 5-10% tolerance.

Health & Safety

This product contains epoxy resin, which can cause skin irritation. Wear disposable gloves during handling. In case of eye contact, rinse immediately with running water and seek medical assistance. Refer to the Safety Data Sheet (SDS).

Shelf Life & Storage

Store the resin and hardener in their original sealed containers at **18°C to 25°C**. Stir the resin before use and keep the hardener tightly sealed against humidity. Usable for up to **12 months** under these conditions.

Site Photos





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Installation Procedures

1 Surface Preparation | 2 Mixing | 3 Application

Step 1
SURFACE PREPARATION

Proper surface preparation is required to ensure full bonding strength across all substrates.

Concrete Substrates: Prepare surfaces using mechanical techniques like grit blasting, scarifying, bush hammering, or wire brushing to eliminate laitance and loose particles. Conduct pull-off tests if surface strength is uncertain to verify structural integrity prior to application. Ensure new concrete is cured for a minimum of 14 days. For old concrete contaminated with grease or oil, steam clean thoroughly using an appropriate detergent to remove all residues.

Steel Substrates: Thoroughly grit-blast or abrade steel surfaces using a power brush, then degrease using a suitable solvent.

Step 2
MIXING

Stir the resin and the hardener thoroughly before use. Combine one container of **UNISTICK EA 1015-A** with one container of **UNISTICK EA 1015-B** (**100 : 50** by weight) and mix completely until a uniform grey colour is obtained. Use mechanical stirring, ideally with a low-speed electric drill; mix by hand only for small quantities.

Step 3
APPLICATION

Apply the mixed adhesive by buttering both surfaces whenever feasible, press the substrates firmly together, and clean off any excess material.

When bonding a steel plate to the soffit of a structure, apply an adequate thickness of mixed adhesive directly onto the steel plate to prevent void formation as it is raised into position and surplus adhesive squeezes out.

Important Notes

- Mixing ratio for **UNISTICK EA 1015-A/B** should be 100 : 50
- **UNISTICK EA 1015-A/B** can maintain a pot life of 140-180 minutes in 25°C
- The data given are valid for standard test specimen only. Hardening conditions: 4 hours/80°C.

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UNISTICK EA 33

GENERAL PURPOSE EPOXY ADHESIVE PASTE



Product Features

UNISTICK EA 33 is a 98% solids, two-component, general-purpose epoxy adhesive paste. Its thixotropic, **non-sagging** consistency lets it be applied on vertical and overhead surfaces without running or dripping.

It bonds strongly to concrete, metal, wood, ceramic and rigid plastics, and is used for structural bonding and for filling crack lines in concrete walls and floors, as well as for marine, furniture and FRP composite bonding.

Advantages

- Non-Sagging Paste, For Vertical And Overhead Work
- 98% Solids, Low VOC
- Bonds Concrete, Metal, Wood, Ceramic And Rigid Plastics
- Simple 1 : 1 Mixing Ratio By Weight
- Touch Dry In About 4 Hours At 25°C

Fields of Application

- Structural bonding and sealing crack lines in concrete walls and floors
- Bonding metal, wood, ceramic and rigid plastic parts, incl. furniture joinery
- Marine and boat sealing requiring durable, high-adhesion bonding
- Composite (FRP) bonding, jointing and surface repairs

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Technical Properties

Property	Unit Measurement	Result
Tensile Strength	N/mm²	20
Compressive Strength	N/mm²	52
Elongation At Break	%	3.0
Bond Strength to Concrete	-	Concrete Failure

Physical Properties

Material	:	Thixotropic epoxy adhesive paste
Colour	:	Off-White
Number of Components	:	2
Mixing Ratio (by weight)	:	1 : 1 (by weight)
Pot Life @ 25°C	:	30 minutes (100 g mass)
Touch Dry @ 25°C	:	4 hours
Cleaning Agent	:	Xylene or MEK Solvent
Flash Point	:	Part A: > 100°C | Part B: > 100°C
Packing Size	:	5 kg / 10 kg set (Part A + Part B)

Health & Safety

Do not ingest. Avoid contact with eyes and skin, as the material may cause irritation or sensitisation; wear protective clothing and gloves. In case of eye contact, flush immediately with clean water and seek medical attention. Keep out of reach of children. Safety Data Sheets (SDS) are available on request.

Shelf Life & Storage

Store **UNISTICK EA 33** at or below **30°C**, away from direct sunlight and rain, and keep the containers sealed until ready for use. Shelf life is **6 months** from the shipment date when stored indoors at 30°C.

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Installation Procedures

1 Preparation | 2 Mixing | 3 Application | 4 Cleaning

Step 1
SURFACE PREPARATION

Make sure the surfaces to be bonded are clean and dry, free from dust, dirt, oil and grease.

Step 2
MIXING

Combine both components in the correct ratio (**1 : 1** by weight).

Mix thoroughly until the mixture achieves a uniform colour.

Do not mix more than **1.0 kg** at a time: larger masses build up heat, which shortens the pot life. Use all mixed material before it starts to set.

Step 3
APPLICATION

Apply the mixed paste to the bonding surfaces with a spatula or trowel. It does not sag, so it can be used on vertical and overhead surfaces and pressed into crack lines. Hold the bonded parts in firm contact until handling strength develops, normally after **6 – 7 hours at 28°C**; the clamping pressure can then be removed, but keep loading to a minimum until full bond strength develops.

Full performance develops after curing for approximately **7 days at 28°C**. Curing can be accelerated by heating up to 80°C for 2 hours (small masses only).

Step 4
CLEANING

Clean tools and equipment with xylene or MEK solvent before the adhesive cures. Cured adhesive can only be removed mechanically.

Important Notes

- Apply all mixed material within its specified pot life to avoid premature hardening.
- Apply between 10°C and 35°C, avoiding direct sunlight. Note that temperatures above 30°C significantly shorten working time.
- Ensure surfaces are completely dry; do not apply on damp, wet, or moisture-laden substrates.
- Do not attempt to thin the material with solvents.

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