PRODUCT BROCHURE
JOINT SEALANTS

SELF LEVELLING JOINT SEALANT

CSL 316 SL

Silicone sealant for concrete joints on roads, bridges, airports and ports.

- One part
- Neutral cure
- No primer on clean concrete
- Grey, custom colours on request



Open longitudinal joint on a concrete road.

MOVEMENT · ASTM C719

+100 / –50%

Four times the stretch and twice the squeeze of a ±25% polyurethane.

ELONGATION · ASTM D412

1,000%

At 10 Shore A it stays soft, so the joint edges carry very little stress.

ROADS · SANRAL PROJECTS

COTO

Conforms to the COTO specification used on SANRAL projects. ASTM D5893 Type SL.

PRODUCT WARRANTY

10 years

Against material defects, on CSL standard terms.

Exclusive distributor of CSL Silicones in Southern Africa

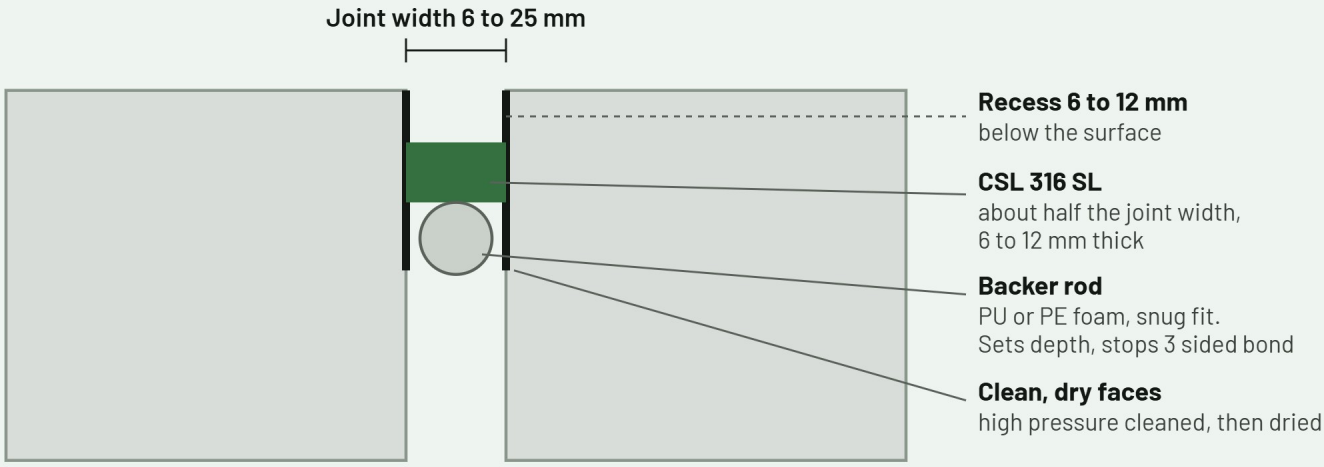
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WHY CONCRETE JOINTS FAIL

Concrete slabs grow and shrink every day. A stiff sealant can't keep up, so it tears or pulls off the joint face.

Water and grit get in, the edges spall and the slabs start to pump. Then the joint has to be cut out and done again.

HOW A 316 SL JOINT IS BUILT



Not to scale. The sealant bonds to the two joint faces only, so it can stretch and squeeze freely.

WHY 316 SL LASTS

01

It levels itself

Fill from the bottom up in one pass and it flows flat. One part, nothing to mix.

02

Low stress on the edges

10 Shore A and +100 / –50% movement. Old, weak arrises are not pulled apart.

03

Silicone outdoors

Neutral cure, minus 60°C to 200°C. CSL reports joints in service for over 20 years.

WHERE IT GOES

- Concrete roads and highways
- Bridge deck joints
- Airport aprons and taxiways
- Ports and container terminals
- Mine yards, plant slabs and logistics yards

NOT FOR

- Vertical or overhead joints. It runs out; use a gun grade sealant
- Joints under 6 mm or over 25 mm wide
- Saw cut floor joints under hard forklift wheels
- Permanent immersion or drinking water, without asking us first

INSTALL IT RIGHT

1 **Clean the joint**
High pressure clean the joint faces to get out dust, debris and loose material, then let them dry fully. New concrete needs at least 7 days to cure and dry.

2 **Set the backer rod**
Polyurethane or expanded polyethylene foam, snug on both sides, at the depth that gives the right sealant thickness and recess.

3 **Run a trial bead**
On the actual concrete. Check adhesion after 7 days. It normally bonds unprimed to clean, dry concrete and steel.

4 **Fill and tool**
Fill from the bottom up in one continuous pass, then tool against the joint faces. Leave it 6 to 12 mm below the surface.

5 **Open to traffic**
Once the sealant is properly recessed and the joint is cleaned up, traffic can run.

TECHNICAL DATA

Performance	
Specification	ASTM D5893 Type SL
Movement, ASTM C719	+100 / –50%
Hardness, ASTM D2240	10 Shore A
Elongation, ASTM D412	1,000%
Weathering, ASTM C793	No degradation
Roads	Conforms to COTO
Service temperature	Minus 60°C to 200°C

Application	
Joint width	6 to 25 mm
Sealant thickness	About half the width, 6 to 12 mm
Ambient temperature	Up to 50°C
Tooling · tack free	About 22 min · 90 min
Cured · full properties	48 h · 7 days
Packs	300 ml, 18.9 L, 189 L
Shelf life	12 months, dry, below 32°C

Cure times at 25°C and 50% RH. For colder conditions, ask us first. Fuel resistance for airports comes from CSL's modified ASTM C719 cycle: 7 days in JP-4 jet fuel, Skydrol B, hydraulic fluid and 50:50 glycol and water. SANRAL does not approve products; it works to the COTO specification.

Full product page, TDS and FAQ:
tssupplies.co.za/joint-sealants

ALSO FROM TSS

ONE SUPPLIER FOR SILICONE COATINGS AND SEALANTS

Every product comes from CSL Silicones in Canada, with the test data to back it and TSS support on site.

570 HS

FLASHOVERS

Si-COAT 570 HS Insulator Coating

RTV silicone for insulators, bushings and arresters. Passed both IEC TR 62730 tests, reports on request.

461 RC

LEAKING ROOFS

CSL 461 RC Roof Coating

High solids silicone roof coating for factories, warehouses and commercial roofs. Withstands ponding water.

579 CM

RUST

Si-COAT 579 CM Corrosion Coating

One coat over prepared rust on above ground steel. Outperformed 28 other coatings in a three year Florida Fence Test.

532 AG

GRAFFITI

Si-COAT 532 AG Clear Anti Graffiti

Clear, low VOC coating. Walls, trains and signs keep their look, and graffiti cleans off.

SEND US THE PROBLEM

Photos, a rough size and where it is. We'll come back with the right product and how to apply it.

Scan to send it

Technical Solution Supplies

Proud exclusive distributor of CSL Silicones across Southern Africa, including the DRC and the Seychelles.

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