

CSL-342 Technical Data Sheet

Non-Slump Silicone Concrete Joint Sealant

1. PRODUCT NAME

CSL-342 Non-Slump Silicone Concrete Joint Sealant

2. FEATURES

- Neutral cure formulation
- Withstands ±50% joint movement
- High elasticity
- Approved by many United States DOT's
- Concrete grey color

3. PRODUCT DESCRIPTION

CSL-342 is a non-slump one-part, moisture curing RTV silicone sealant. It cures to a low durometer and is ideally suited for vertical and horizontal joints in concrete.

CSL-342 may be applied easily over a temperature range of -18°C (0°F) to 50°C (120°F) and will exhibit excellent unprimed adhesion to concrete, steel and most other construction substrates, provided they are clean, dry and free of dust and frost. CSL-342 has good flexibility and a low modulus, so it will maintain its integrity on joints with movement. Being silicone, CSL-342 is unaffected by sunlight (ultra-violet rays),

ozone, temperature extremes, rain and snow. At conditions of 25°C (77°F) and 50% relative humidity, CSL-342 will skin over within 10 minutes and cure within 48 hours. Maximum strength will be developed in 21 days. CSL-342 has a long service life, under normal conditions it will maintain its physical properties between -45°C (-50°F) and 149°C (300°F).

4. INSTALLATION

Joint Design

In general, it is recommended that the depth of CSL-342 be equal to one half the joint width. Ideally, sealant thickness should be between 1/4" (6mm) and 1/2" (12mm) below the surface. The use of a polyurethane or expanded polyethylene foam backer rod prevents undesired three-sided adhesion and maintains correct sealant depth. The backer rod must be a snug fit on both sides of the joint throughout its length.

Surface Preparation

New concrete should be allowed to cure and dry for at least 7 days. All joints must be clean, dry and free of contaminants before

Typical Properties

These values are not intended for use in preparing specifications

Uncured

Type	100% silicone, one-part RTV
Appearance	Smooth, non-slump paste
Specific Gravity	1.13
Slump/Sag	Nil
Extrusion Rate (3.2mm (1/8") orifice, 90psi)	100 g/min.
Application Temperature Range	-18°C to 50°C (0°F to 120°F)
Cure System	Neutral, Moisture Cure
Tooling Time	5 - 10 min.
Tack Free Time	30 min.
Cure Time at Standard Conditions*	24 hr.

Cured

At Standard Conditions* for 7 Days

Durometer Hardness (ASTM D2240, Shore A)	20 points
Durometer Hardness (Shore 00)	74 points
Tensile Strength (ASTM D412)	10.5 kg/cm ² (150 psi)
Elongation at Break (ASTM D412)	600%
Joint Movement Capability	±50%
Adhesion to Concrete (ASTM C-794)	>8.5 kN/m (>50 pli)

*Standard Conditions are 25°C (77°F) and 50% relative humidity

the backer rod is installed and CSL-342 is applied. If a joint is flushed with water, it should be done only in one direction to reduce contamination. After drying, the top inch (25mm) of each face should be sandblasted in a separate pass, with the nozzle held at an angle no more than two inches (50mm) from the face. Dust and loose particles must be blown out of the joint with oil-free compressed air, moving only in one direction. An oily surface may reduce adhesion.

Joint Dimensions

The backer rod should be installed at the appropriate depth to provide the correct thickness of CSL-342 and recessed below the surface, as shown in the table below. The sealant should be applied in one continuous movement with the nozzle set to fill the joint from the bottom up to avoid creating air voids. The sealant should be tooled to force it against the joint faces for maximum adhesion and to provide a recess below the surface, shown below. Excess sealant should be scraped up and removed. If joints are properly recessed, the highway may be returned to traffic as soon as installation and clean up are completed.

5. PACKAGING

CSL-342 is available in 300ml (10.2 fl oz) caulking cartridges, 19L (5 US gallon) pails and 189L (50 US gallon) drums.

6. STORAGE

CSL-342 when stored in original unopened container at or below 32°C (90°F) has a one year shelf life from the date of manufacture. Most products however, will last longer if stored in cool dry conditions.

7. SAFETY PRECAUTIONS

CSL-342 uses a neutral cure system, so no acetic acid or objectionable by-products are evolved during cure. Adequate ventilation should be provided with extensive use of this sealant. On direct contact, uncured sealant may irritate eyes. Flush well with water and call a physician. Avoid prolonged contact with skin. See Material Safety Data Sheet available on this product. **KEEP OUT OF REACH OF CHILDREN.**

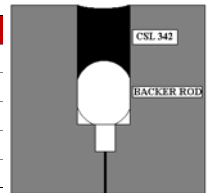
8. WARRANTY

CSL Silicones Inc. warrants that its products will meet its specifications. CSL shall in no event be liable for incidental or consequential damages. Except as expressly stipulated, CSL's liability, expressed or implied, is limited to the stated selling price of any defective goods.

Data is subject to change without notice and it is therefore recommended that this information not be used for specification writing. For additional information on specific applications, contact the manufacturer.

Recommended Joint Dimensions & Estimated Sealant Consumption

Joint Width (mm)	6	10	12	20	25	Joint Width (inches)	1/4	3/8	1/2	3/4	1
Backer Rod diameter (mm)	10	13	16	25	30	Backer Rod diameter (in.)	3/8	1/2	5/8	1	1 1/4
Backer Rod recess below surface (mm)	12	12	12	16	24	Backer Rod recess below surface (in.)	1/2	1/2	1/2	5/8	1
Sealant Thickness (mm)	6	6	6	10	12	Sealant Thickness (in.)	1/4	1/4	1/4	3/8	1/2
Sealant recess below surface (mm)	6	6	6	6	12	Sealant recess below surface (in.)	1/4	1/4	1/4	1/4	1/2
Est. linear meter/liter	24	16	12	5	3	Est. linear feet/US gallon	275	185	140	60	35



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