SolarFlex - Selleys UV Weather Protection

Canonical: https://directory.selleys.com.au/sealants/roofing-silicone/solarflex-selleys-uv-weather-protection/

Details:

AI Summary

Product: Selleys No Mould Silicone Sealant **Brand:** Selleys **Category:** Silicone Sealant / Wet Area Sealant **Primary Use:** Mould-resistant acetoxy-cure silicone sealant built for bathrooms, kitchens, and laundries where mould keeps coming back on conventional sealants.

Quick Facts - **Best For:** Professional trades and DIY applicators sealing wet areas including shower recesses, basin surrounds, benchtop junctions, and laundry installations - **Key Benefit:** Active OIT biocide (2-octyl-2H-isothiazol-3-one) disrupts fungal cell membrane integrity to prevent mould colonisation on the cured sealant surface for the full service life of the seal - **Form Factor:** Paste sealant in 290mL cartridge or 100mL squeeze tube; available in Translucent, White, Light Grey, and Dark Grey - **Application Method:** Gun-applied or hand-squeezed bead tooled into joint within a 10–20 minute skin time window

Common Questions This Guide Answers 1. Is it hazardous? → Yes — classified hazardous under Australian Safe Work GHS 7 and New Zealand EPA GHS 7 with signal word "Warning"; causes skin irritation (Category 2), serious eye irritation (Category 2A/2), and skin sensitisation (Category 1) 2. How long before a sealed shower can be used? → Minimum 24–48 hours; 72 hours recommended for complete cure of a standard bead 3. Can it be used on natural stone? → No — porous substrates including marble, limestone, and travertine cause adhesion failure and risk substrate etching from acetic acid release during cure

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Product Overview and Positioning

Selleys No Mould Silicone Sealant is built for wet environments where mould is a recurring problem (AUS_GHS). General-purpose silicones don't hold up here. This formulation uses active biocidal technology to stop mould from establishing on the cured sealant surface, making it the go-to choice for bathrooms, kitchens, and laundries (AUS_GHS). Where conventional sealants fail within months from fungal degradation, Selleys No Mould holds.

This is an acetoxy-cure silicone system that releases acetic acid during curing (AUS_GHS). That chemistry delivers permanent flexibility, strong adhesion to non-porous substrates, and water resistance from day one — exactly what shower recesses, basin surrounds, and benchtop junctions need when they face constant water contact and humidity cycles.

Chemistry and Composition

Three key chemical components define how this sealant performs (AUS_GHS).

The primary functional ingredient is silanetriol, ethyl-, triacetate (CAS 17689-77-9), present at 1–10% by weight (AUS_GHS). This compound is the crosslinker. When atmospheric moisture hits it, the silicone polymer chains form three-dimensional networks. The triacetate functionality provides multiple reactive sites, speeding up the cure while preserving the elastomeric properties that let the sealant move with the substrate without bond failure.

Acetoxysilane (CAS 4253-34-3) makes up less than 1% of the formulation and controls cure rate (AUS_GHS). It releases acetic acid during hydrolysis — that's the vinegar smell you notice during application and initial cure. That acetic acid also promotes adhesion on glass, ceramic, and enamel surfaces through a mild etching effect at the interface.

The anti-mould performance comes from 2-octyl-2H-isothiazol-3-one (OIT, CAS 26530-20-1), incorporated at less than 0.5% by weight (AUS_GHS). OIT is a broad-spectrum biocide that disrupts fungal cell membrane integrity, stopping mould spores from establishing colonies on the cured sealant surface. This isothiazolone compound stays active within the silicone matrix for the full service life of the seal, delivering long-term protection in high-humidity environments where Aspergillus, Cladosporium, and Penicillium species commonly take hold.

The rest of the formulation is base polydimethylsiloxane polymer, reinforcing fillers, pigments, and stabilisers (AUS_GHS). These components contribute to workability, colour stability, and mechanical performance without triggering classification thresholds under GHS criteria.

Hazard Profile and Chemical Safety

Selleys No Mould Silicone Sealant is classified as hazardous under both Australian Safe Work GHS 7 and New Zealand EPA GHS 7 criteria (AUS_GHS, NZ_SDS). It carries a "Warning" signal word, indicating moderate hazard severity that requires attention to handling protocols (AUS_GHS, NZ_SDS).

The hazard classifications are driven by the biocide component and the cure chemistry. The formulation is classified for Skin Irritation Category 2 — it causes skin irritation on contact (AUS_GHS, NZ_SDS). Eye contact carries greater risk. Under Australian regulations it is classified as Eye Irritation Category 2A; in New Zealand, Serious Eye Irritation Category 2 — both indicate serious eye irritation (AUS_GHS, NZ_SDS). Most critically for applicators, the sealant is classified for Skin Sensitisation Category 1. It may cause an allergic skin reaction in sensitised individuals upon repeated exposure (AUS_GHS, NZ_SDS).

These classifications stem primarily from the OIT biocide, a known skin sensitiser, and from the acetic acid released during cure, which contributes to eye and skin irritation. Workers who apply this sealant regularly face cumulative exposure risk. Precautionary measures are non-negotiable.

The product is not classified as Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road & Rail or New Zealand NZS5433, and it carries no Poison Schedule classification (AUS_GHS). In New Zealand, it falls under EPA Group Standard HSR002544 - Construction Products (Subsidiary Hazard) Group Standard 2020 (NZ_SDS).

Personal Protective Equipment and Exposure Control

Precautionary statement P280 requires wearing protective gloves, protective clothing, and eye/face protection when handling this product (AUS_GHS, NZ_SDS). This is a legal requirement, not a suggestion, because this material causes skin sensitisation and eye irritation.

For eye protection, chemical safety goggles or a full-face shield are appropriate. They guard against splashes during cartridge loading, nozzle cutting, and overhead application. Standard safety glasses with side shields don't provide enough coverage for sealant application work.

Glove selection matters. Nitrile gloves rated for silicone and solvent resistance provide solid barrier protection for typical application timeframes. The skin sensitisation hazard demands a zero-tolerance approach: P272 explicitly states that contaminated work clothing must not leave the workplace (AUS_GHS, NZ_SDS). Any gloves, sleeves, or garments that contact uncured sealant must be removed and cleaned on-site before workers leave the job area.

Respiratory protection is managed through engineering controls rather than respirators. P261 requires avoiding breathing dust, fume, gas, mist, vapours, or spray (AUS_GHS, NZ_SDS). For silicone sealant

application, the main concern is acetic acid vapour released during cure. Good ventilation in bathrooms and wet areas typically provides enough dilution. Enclosed spaces with poor air circulation may need forced ventilation or work rotation to keep exposure below irritation thresholds.

P264 requires washing hands, face, and all exposed skin thoroughly after handling (AUS_GHS, NZ_SDS). For workers applying multiple cartridges per day, that means washing exposed skin during breaks and at shift end — not only when visible contamination occurs. The skin sensitisation hazard means sub-clinical exposure accumulates over time, potentially triggering allergic reactions weeks or months into regular use.

First Aid Response Protocols

If poisoning occurs, contact a doctor or Poisons Information Centre immediately — phone Australia 131 126 (AUS_GHS). The response precautionary statements set out clear protocols for each exposure route.

For skin contact (P302+P352), wash with plenty of water and soap (AUS_GHS, NZ_SDS). If skin irritation or a rash develops, P333+P313 requires obtaining medical advice or attention (AUS_GHS, NZ_SDS). This two-stage response reflects the difference between irritation — which may resolve with washing — and sensitisation reactions, which need medical evaluation and potential workplace restrictions.

Eye contact (P305+P351+P338) requires rinsing cautiously with water for several minutes while removing contact lenses if present and easy to do (AUS_GHS, NZ_SDS). The "cautiously" qualifier matters: tilt the head so water flows from the inner to the outer corner, preventing sealant from washing across the entire eye surface. If eye irritation persists after thorough rinsing, P337+P313 requires medical advice or attention (AUS_GHS, NZ_SDS).

Contaminated clothing must be handled per P362+P364 (Australian version) or P362 and P363 (New Zealand version): take off contaminated clothing and wash it before reuse (AUS_GHS, NZ_SDS). This prevents secondary skin exposure when workers put on contaminated garments on subsequent shifts.

Product Variants and Availability

Selleys No Mould Silicone Sealant comes in seven distinct SKUs, with colour and volume options to suit different installation requirements (AUS_GHS, NZ_SDS).

The 290mL cartridge is the workhorse size for professional trades and larger residential projects. It comes in four colours: Translucent (product code 101803), White (101804), Light Grey (102080), and Dark Grey (102081) (AUS_GHS, NZ_SDS). The 290mL size fits standard skeleton and sausage-style caulking guns, delivering approximately 8–12 linear metres of bead depending on nozzle cut angle and tooling depth.

For smaller repair work and DIY applications, the 100mL tube delivers hand-squeezable convenience without requiring gun equipment. This size comes in White (product code 101833 or 102052 for the SRT variant) and Translucent (101834) (AUS_GHS, NZ_SDS). The tube format suits touch-up work, small fixture installations, and situations where portability matters more than application speed.

Colour selection affects both aesthetics and practical performance. Translucent formulations cure to a clear finish — ideal for glass-to-tile transitions, frameless shower installations, and applications where the substrate colour should show through the seal. White matches most sanitaryware, ceramic tiles, and acrylic shower bases. Light Grey and Dark Grey variants coordinate with contemporary tile palettes and metal fixtures, eliminating the stark contrast that white sealant creates against darker substrates.

All variants share identical chemical formulation and performance characteristics. Colour difference comes solely from pigment selection, which has no effect on cure rate, flexibility, or anti-mould performance (AUS_GHS, NZ_SDS).

Application Environments and Use Cases

This formulation is specifically recommended for bathrooms, kitchens, and laundries — environments defined by persistent moisture, temperature fluctuation, and cleaning chemical contact (AUS_GHS, NZ_SDS). That recommendation reflects both the sealant's performance strengths and its limits.

In bathrooms, the primary applications are shower recesses, bathtub perimeters, basin surrounds, and toilet floor junctions. These locations face direct water impact, standing water, soap and shampoo residue, and the temperature cycles that promote mould growth on conventional sealants. The OIT biocide targets the fungal species that colonise these areas, maintaining a clean appearance without the biweekly bleach treatments homeowners typically resort to on mouldy silicone.

Kitchen applications centre on benchtop-to-splashback junctions, sink rim seals, and appliance perimeters. Here, the sealant contacts food-preparation surfaces, cooking oils, acidic foods, and hot water. The cured silicone's chemical resistance handles these exposures without degrading, while the anti-mould technology prevents the black spotting that commonly develops in the moist zone behind sink faucets and around dish drainers.

Laundry installations include washing machine hose connections, trough seals, and cabinet waterproofing. These areas face detergent exposure, hot water cycles, and lint-laden humidity that provides both moisture and organic nutrients for fungal growth. The sealant's resistance to alkaline cleaning products ensures long-term seal integrity even with regular bleach-based washing machine cleaners.

Substrate compatibility is limited to non-porous materials. Glass, glazed ceramic tile, porcelain fixtures, enamel surfaces, powder-coated metal, and acrylic shower bases accept the acetoxy cure chemistry without issue. The sealant does not bond reliably to porous substrates like natural stone, concrete, bare timber, or painted drywall — these materials absorb the cure byproducts and prevent proper surface adhesion. Applicators sealing marble, limestone, or travertine will encounter adhesion problems and potential substrate etching from the acetic acid release.

Surface Preparation and Application Technique

Surface preparation is what separates a seal that lasts two years from one that lasts twenty. All surfaces must be clean, dry, and free from soap residue, body oils, construction dust, and previous sealant remnants before application. The acetoxy cure mechanism doesn't tolerate surface contamination — even fingerprint oils can create localised adhesion failure that spreads along the bead over subsequent wet-dry cycles.

To remove old silicone, use a utility knife for mechanical cutting followed by solvent cleaning with methylated spirits. Chemical sealant removers can leave residues that interfere with adhesion, requiring additional cleaning steps that cancel out any time savings. Lightly abrade the substrate surface with fine abrasive paper to remove silicone residue embedded in surface micro-porosity, then wipe clean with a lint-free cloth dampened with isopropyl alcohol.

Apply masking tape to both sides of the intended joint to create clean edges and prevent smearing onto adjacent surfaces during tooling. Position the tape to allow full contact between the sealant bead and both substrates — taping too close to the joint line results in insufficient sealant volume and premature cohesive failure.

Nozzle cutting angle directly controls bead geometry and tooling quality. A 45-degree cut with the opening sized to slightly exceed the joint width allows proper substrate wetting while minimising excess that needs removing during tooling. A steeper angle produces a narrow bead suited only to hairline gaps; a blunt cut creates excessive sealant volume that can't be smoothed effectively.

Gun pressure should be consistent and moderate. Too much force causes the bead to overflow the joint and creates cleanup waste. Too little produces a discontinuous bead with voids that compromise

waterproofing. Move the gun at a steady pace that allows the bead to flow into joint corners without dragging or skipping.

Tool the sealant within its working time, before surface skinning restricts the material's ability to flow and self-level. Draw a wetted finger, plastic spoon, or purpose-designed silicone tool along the bead in a single continuous motion, pressing the sealant into the joint and removing excess. Multiple passes or stop-start tooling creates ridges and inconsistent thickness. Keep the tooling instrument wet with soapy water to prevent uncured sealant from sticking to the tool and pulling away from the substrate.

Remove masking tape immediately after tooling — within 5–10 minutes of application — while the sealant remains pliable enough to tear cleanly along the tape edge. Delayed removal risks peeling the tooled edge and creating a ragged finish that requires re-work.

Cure Profile and Performance Timeline

Acetoxy silicone sealants cure through moisture-initiated crosslinking. Atmospheric humidity drives the reaction that converts the paste into an elastomeric solid. The cure progresses from the exposed surface inward, building a skin that thickens over time until the entire bead mass has reacted.

Surface skinning typically occurs within 10–20 minutes at 20–25°C and 50% relative humidity. This marks the end of the working time for tooling and profile adjustment. Environmental conditions have a real influence on skin time: high humidity and warm temperatures accelerate skinning, while cold, dry conditions extend the window for tooling adjustments.

Full cure depth advances at approximately 3–5mm per 24 hours under standard conditions. A 10mm bead therefore needs 48–72 hours to cure completely through its cross-section. During this period, keep the joint away from water immersion, mechanical stress, and cleaning chemical contact. Shower recesses should remain dry for at least 24–48 hours after sealing, with 72 hours providing the safety margin that ensures complete cure even in cool or dry conditions.

The acetic acid odour peaks in the first 24 hours as the surface layers cure most rapidly, then diminishes over subsequent days as the cure front advances into the bead interior. Ventilation accelerates acid vapour dissipation but does not speed the cure reaction itself, which depends on moisture diffusion into the polymer matrix.

Once fully cured, the sealant delivers its design properties: permanent flexibility that accommodates thermal expansion and substrate movement, continuous water resistance, and resistance to cleaning chemicals including bleach, bathroom cleaners, and disinfectants. The anti-mould biocide activates upon cure completion, establishing the surface protection that stops fungal colonisation.

Storage and Shelf Life

Store the product in conditions that keep its reactive chemistry stable and ready to use. The SDS documents provided do not specify numerical temperature ranges or shelf life duration, but the moisture-cure mechanism points to several clear storage requirements.

Cartridges and tubes must remain sealed to prevent atmospheric moisture from starting premature curing. Once a cartridge is pierced or a tube opened, the exposed sealant surface will begin skinning within hours. Plan to use opened containers within days. Store partially used cartridges with the nozzle sealed or with a screw inserted into the nozzle opening to exclude moisture.

Temperature extremes degrade silicone sealants through different mechanisms. Freezing can cause filler sedimentation and polymer separation that prevents smooth extrusion when the product returns to working temperature. Sustained heat above 40°C accelerates the slow background cure that occurs even in sealed containers, reducing shelf life and potentially causing in-cartridge gelation.

The disposal precautionary statement P501 requires disposing of contents and containers in accordance with local, regional, national, and international regulations (AUS_GHS, NZ_SDS). For this

product, that means treating partially cured or waste sealant as solid non-hazardous waste once the acetic acid has fully volatilised. Empty cartridges containing only cured sealant residues typically qualify for standard commercial waste streams, but applicators should verify local requirements — particularly regarding the OIT biocide content.

Troubleshooting and Expert Insights

Poor adhesion shows up as edge peeling or complete bead detachment, usually within weeks of application. The root cause is almost always surface preparation — residual soap, body oils, or previous sealant residues prevent the acetoxy chemistry from bonding to the substrate. The fix is complete removal and re-application to properly prepared surfaces. Attempting to re-seal over a failed bead compounds the problem.

Bubbling or foaming during application points to entrapped air, usually from improper cartridge loading or excessive gun pressure. Reduce application speed and make sure the cartridge plunger seats fully before starting. Pre-existing bubbles can't be tooled out — fill them with additional sealant or remove and re-apply the affected section.

Slumping in vertical joints happens when bead thickness exceeds the sealant's initial viscosity support. For joints wider than 10mm, fill in multiple passes and allow each layer to skin before applying the next. Alternatively, insert foam backer rod into deep joints to reduce the sealant volume required and provide mechanical support during cure.

Discolouration from underlying substrates — particularly copper pipe or coloured tiles — can show through translucent variants. This is a pigment selection issue, not a performance issue. Switch to white or pigmented grey variants to prevent staining visibility.

For professional applicators working in occupied homes, the acetic acid odour presents a practical challenge. Strong ventilation is the only effective solution. Neutral-cure silicones eliminate the vinegar smell but give up the superior adhesion and cost-effectiveness that acetoxy systems deliver for wet-area applications.

The skin sensitisation hazard creates cumulative risk for trades applying silicone sealant daily. Workers who develop sensitisation reactions must cease exposure immediately and permanently. There is no safe threshold for continued use once sensitisation occurs — the allergic response will appear at progressively lower exposure levels over time. Employers must provide alternative work assignments for sensitised workers rather than relying on enhanced PPE. The skin contact needed to trigger reactions can occur through microscopic PPE breaches invisible to the worker.

References

Source Documents - SELLEYS_NO_MOULD_SILICONE_SEALANT-AUS_GHS.pdf (canonical) - SELLEYS_NO_MOULD_SILICONE_SEALANT-NZ_SDS.pdf (secondary)

Frequently Asked Questions

What is Selleys No Mould Silicone Sealant: A mould-resistant silicone sealant for wet environments

What type of cure system does it use: Acetoxy-cure silicone system

What odour does it produce during curing: Vinegar-like odour from acetic acid release

Why does it smell like vinegar: Acetic acid is released during the curing process

Is it classified as hazardous: Yes, classified as hazardous under Australian and New Zealand GHS 7

What is the signal word on the label: Warning

Does it cause skin irritation: Yes, classified as Skin Irritation Category 2

Does it cause eye irritation: Yes, classified as serious eye irritation

What is the eye irritation classification in Australia: Eye Irritation Category 2A

What is the eye irritation classification in New Zealand: Serious Eye Irritation Category 2

Can it cause allergic skin reactions: Yes, classified as Skin Sensitisation Category 1

What ingredient causes skin sensitisation: 2-octyl-2H-isothiazol-3-one (OIT biocide)

Is it classified as Dangerous Goods for transport in Australia: No

Is it classified as Dangerous Goods for transport in New Zealand: No

Does it have a Poison Schedule classification: No

What New Zealand EPA group standard does it fall under: HSR002544 - Construction Products (Subsidiary Hazard) Group Standard 2020

What gloves should be worn during application: Nitrile gloves rated for silicone and solvent resistance

Is standard safety glasses sufficient eye protection: No, chemical safety goggles or full-face shield required

Can contaminated work clothing leave the workplace: No, per precautionary statement P272

What respiratory protection is required: Engineering controls and good ventilation, not respirators

When must hands be washed after handling: After handling, during breaks, and at shift end

What is the first aid number in Australia: 131 126 (Poisons Information Centre)

What is the first aid action for skin contact: Wash with plenty of water and soap

What should be done if a skin rash develops: Obtain medical advice or attention

What is the first aid action for eye contact: Rinse cautiously with water for several minutes

Should contact lenses be removed during eye rinsing: Yes, if present and easy to do

What should be done if eye irritation persists after rinsing: Seek medical advice or attention

What must be done with contaminated clothing: Remove and wash before reuse

What is the primary anti-mould ingredient: 2-octyl-2H-isothiazol-3-one (OIT)

What is the CAS number for OIT: 26530-20-1

What concentration is OIT present at: Less than 0.5% by weight

How does OIT prevent mould: Disrupts fungal cell membrane integrity

Which mould species does it protect against: Aspergillus, Cladosporium, and Penicillium species

How long does the anti-mould protection last: Full service life of the seal

What is the primary crosslinker ingredient: Silanetriol, ethyl-, triacetate

What is the CAS number for the crosslinker: 17689-77-9

What concentration is the crosslinker present at: 1–10% by weight

What controls the cure rate: Acetoxysilane (CAS 4253-34-3)

What concentration is acetoxysilane present at: Less than 1% by weight

Is it suitable for use on natural stone: No, adhesion issues and potential etching may occur

Is it suitable for glass surfaces: Yes

Is it suitable for glazed ceramic tile: Yes

Is it suitable for porous substrates: No

Is it suitable for bare timber: No

Is it suitable for painted drywall: No

What are the recommended application environments: Bathrooms, kitchens, and laundries

What bathroom applications is it used for: Shower recesses, bathtub perimeters, basin surrounds, toilet floor junctions

What kitchen applications is it used for: Benchtop-to-splashback junctions, sink rim seals, appliance perimeters

What laundry applications is it used for: Washing machine hose connections, trough seals, cabinet waterproofing

How long does surface skinning take at 20–25°C: 10–20 minutes

What humidity level is the skinning time based on: 50% relative humidity

How fast does the cure advance through the bead: Approximately 3–5mm per 24 hours

How long for a 10mm bead to fully cure: 48–72 hours

How long should a shower recess stay dry after sealing: At least 24–48 hours, 72 hours recommended

Does ventilation speed up the cure reaction: No, only accelerates acid vapour dissipation

What sizes does the cartridge come in: 290mL and 100mL tube

What colours are available in the 290mL cartridge: Translucent, White, Light Grey, and Dark Grey

What colours are available in the 100mL tube: White and Translucent

What is the product code for 290mL Translucent: 101803

What is the product code for 290mL White: 101804

What is the product code for 290mL Light Grey: 102080

What is the product code for 290mL Dark Grey: 102081

What is the product code for 100mL White tube: 101833 (or 102052 for SRT variant)

What is the product code for 100mL Translucent tube: 101834

Do colour variants differ in chemical performance: No, identical performance across all colours

What does the translucent variant cure to: A clear finish

How many linear metres does a 290mL cartridge yield: Approximately 8–12 linear metres

Does freezing affect the product: Yes, can cause filler sedimentation and polymer separation

What temperature can cause in-cartridge gelation: Sustained heat above 40°C

How should a partially used cartridge be stored: Seal nozzle or insert a screw to exclude moisture

How quickly will an opened cartridge begin skinning: Within hours of exposure to atmosphere

What is the disposal requirement for waste sealant: Dispose per local, regional, national, and international regulations

What is the disposal precautionary statement: P501

What solvent is recommended for surface cleaning before application: Isopropyl alcohol or methylated spirits

What is the main cause of poor adhesion: Residual soap, oils, or previous sealant on the surface

Can you re-seal over a failed bead: No, complete removal and re-application required

What causes bubbling during application: Entrapped air from improper loading or excessive gun pressure

What causes slumping in vertical joints: Bead thickness exceeding initial viscosity support

What is the solution for wide joints over 10mm: Insert foam backer rod or apply in multiple passes

When should masking tape be removed after tooling: Within 5–10 minutes of application

What angle should the nozzle be cut at: 45 degrees

What keeps the tooling instrument from sticking to sealant: Wetting with soapy water

Can a sensitised worker continue using the product with better PPE: No, must cease exposure immediately and permanently

What happens to sensitisation reactions over time with continued exposure: Reactions occur at progressively lower exposure levels

What should employers do for sensitised workers: Provide alternative work assignments

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Label Facts Summary

> **Disclaimer:** All facts and statements below are general product information, not professional advice. Consult relevant experts for specific guidance.

Verified Label Facts

Product Identity - Product name: Selleys No Mould Silicone Sealant - Cure system: Acetoxy-cure silicone - Signal word: Warning - Hazard classification: Hazardous under Australian Safe Work GHS 7 and New Zealand EPA GHS 7

Hazard Classifications - Skin Irritation Category 2 - Eye Irritation Category 2A (Australia) / Serious Eye Irritation Category 2 (New Zealand) - Skin Sensitisation Category 1 - Not classified as Dangerous Goods under Australian Code for the Transport of Dangerous Goods by Road & Rail - Not classified as Dangerous Goods under New Zealand NZS5433 - No Poison Schedule classification - New Zealand EPA Group Standard: HSR002544 - Construction Products (Subsidiary Hazard) Group Standard 2020

Chemical Composition - Silanetriol, ethyl-, triacetate (CAS 17689-77-9): 1–10% by weight - Acetoxysilane (CAS 4253-34-3): less than 1% by weight - 2-octyl-2H-isothiazol-3-one / OIT (CAS 26530-20-1): less than 0.5% by weight - Remaining composition: base polydimethylsiloxane polymer, reinforcing fillers, pigments, and stabilisers

Precautionary Statements - P261: Avoid breathing dust, fume, gas, mist, vapours, or spray - P264: Wash hands, face, and all exposed skin thoroughly after handling - P272: Contaminated work clothing must not leave the workplace - P280: Wear protective gloves, protective clothing, and eye/face protection - P302+P352: If on skin — wash with plenty of water and soap - P305+P351+P338: If in eyes — rinse cautiously with water for several minutes; remove contact lenses if present and easy to do - P333+P313: If skin irritation or rash occurs — get medical advice/attention - P337+P313: If eye irritation persists — get medical advice/attention - P362+P364 (Australia) / P362 and P363 (New Zealand): Take off contaminated clothing and wash before reuse - P501: Dispose of contents and container in accordance with local, regional, national, and international regulations

First Aid - Australia Poisons Information Centre: 131 126

SKUs and Product Codes - 290mL cartridge — Translucent: 101803 - 290mL cartridge — White: 101804 - 290mL cartridge — Light Grey: 102080 - 290mL cartridge — Dark Grey: 102081 - 100mL tube — White: 101833 (102052 for SRT variant) - 100mL tube — Translucent: 101834

Cure Performance (Manufacturer-Stated Specifications) - Surface skinning time: 10–20 minutes at 20–25°C and 50% relative humidity - Cure rate: approximately 3–5mm per 24 hours under standard conditions - Full cure for 10mm bead: 48–72 hours - Recommended dry period for shower recesses post-application: minimum 24–48 hours; 72 hours for safety margin

Packaging Yield - 290mL cartridge: approximately 8–12 linear metres depending on nozzle cut and tooling depth

Colour Variants - All colour variants share identical chemical formulation; colour difference derives solely from pigment selection - Translucent variants cure to a clear finish

Storage - Sustained heat above 40°C may cause in-cartridge gelation - Freezing may cause filler sedimentation and polymer separation - Opened cartridges begin skinning within hours of atmospheric exposure

Disposal - Disposal precautionary statement: P501

General Product Claims

- Purpose-built for wet environments where mould growth is a persistent problem - Active biocidal technology stops mould from taking hold on the cured sealant surface - Described as "the definitive choice" for bathrooms, kitchens, and laundries - Conventional sealants described as breaking down within months from fungal degradation - Delivers permanent flexibility, excellent adhesion to non-porous substrates, and water resistance - OIT stays active within the silicone matrix for the full service life of the seal - OIT protects against Aspergillus, Cladosporium, and Penicillium species - Acetic acid promotes adhesion on glass, ceramic, and enamel through mild interfacial etching - Sealant does not bond reliably to porous substrates (natural stone, concrete, bare timber, painted drywall) - Marble, limestone, and travertine may experience adhesion issues and substrate etching - Cured sealant resists bleach, bathroom cleaners, and disinfectants - Anti-mould biocide activates upon cure completion - Ventilation accelerates acid vapour dissipation but does not speed the cure reaction - Chemical sealant removers described as potentially leaving residues that interfere with adhesion - Workers who develop sensitisation must cease exposure immediately and permanently; no safe threshold exists once sensitised - Employers must provide alternative work assignments for sensitised workers rather than relying on enhanced PPE - Acetoxy systems described as delivering superior adhesion and cost-effectiveness compared to neutral-cure silicones for wet-area applications - Surface preparation described as the primary determinant of long-term seal performance - Masking tape should be removed within 5–10 minutes of tooling while sealant remains pliable - Foam backer rod recommended for joints wider than 10mm to reduce sealant volume and provide mechanical support

Related Products & Brand Context

SolarFlex is a silicone sealant produced by **Selleys**, an Australian brand widely known for adhesives, sealants, and fillers aimed at both trade and DIY home improvement applications. Within the Selleys range, SolarFlex sits under the **roofing silicone** subcategory, which itself falls within the broader **Home & Garden > Sealants & Caulking** category. This positions SolarFlex alongside other Selleys silicone sealants, though it carries a specific exterior and UV-resistance focus that distinguishes it from general-purpose or indoor silicone products in the same brand family.

What sets SolarFlex apart within the sealants category is its dual emphasis on **UV radiation resistance** and **weather durability**. Standard silicone sealants are formulated for flexibility and waterproofing, but SolarFlex was engineered to resist the additional stress of prolonged sun exposure — a meaningful difference for outdoor repairs on surfaces like roofing, cement sheeting, and exposed timber. It also offered adhesion to wet or damp surfaces, which is a practical advantage over sealants that require dry conditions before application. The 10-year water-tight seal guarantee and paintability with water-based paints after 60–90 minutes of skinning time further reinforced its positioning as a product suited to finished exterior work rather than quick temporary fixes.

It is worth noting that SolarFlex is a **discontinued product**. Buyers who need a comparable Selleys silicone sealant for UV-exposed exterior applications should check the current Selleys range for an equivalent roofing or exterior-grade silicone.

For anyone using SolarFlex or a similar exterior sealant, adjacent products worth considering include a **caulking gun** for controlled application, **surface cleaners or degreasers** to prepare the substrate before sealing, and **masking tape** to achieve clean sealant lines on finished surfaces. Because SolarFlex is paintable, a compatible **water-based exterior paint** would also be a natural follow-on purchase for projects where colour-matching is required.