

# Selleys Silicone 401 RTV - Acid Cure Silicone

Canonical: <https://directory.selleys.com.au/sealants/multi-purpose/selleys-silicone-401-rtv-acid-cure-silicone/>

## Details:

### ## AI Summary

**Product:** Selleys Silicone 401 **Brand:** Selleys (Division of DuluxGroup (Australia) Pty Ltd)  
**Category:** Professional-Grade Acid Cure Silicone Sealant **Primary Use:** Single-component RTV sealant for durable, moisture-resistant sealing in demanding residential and commercial interior and exterior applications.

**Quick facts** - **Best for:** Non-porous substrates including glass, ceramics, glazed tile, and painted surfaces in professional or trade applications - **Key benefit:** Aggressive adhesion and flexible, weather-resistant elastomeric bond formed through moisture-initiated acid cure chemistry - **Form factor:** Paste/gel in cartridge - **Application method:** Extrude from cartridge, tool bead immediately, cure at room temperature via atmospheric moisture

**Common questions this guide answers** 1. Is Selleys Silicone 401 safe to use on marble or copper? → No — acetic acid released during curing can etch natural stone and corrode metals including copper, brass, and zinc; neutral cure silicone is recommended for these substrates. 2. What PPE is required when handling this product? → Nitrile rubber gloves, safety glasses with side shields or goggles, protective clothing and overalls, and closed-toe safety shoes are all manufacturer-specified as mandatory. 3. What should I do if this product contacts my eyes? → Immediately irrigate with copious water for a minimum of 15 minutes with eyelids held open, remove contact lenses if present and easy to remove, then seek urgent medical attention — the product is classified Eye Damage Category 1 (H318) and can cause irreversible corneal damage.

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### ## Product overview

Selleys Silicone 401 is a professional-grade acid cure silicone sealant built for demanding residential and commercial applications where durable, moisture-resistant sealing is non-negotiable ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). This single-component RTV (room temperature vulcanising) sealant belongs to the acetoxysilane family of silicones. It cures through reaction with atmospheric moisture, forming a resilient elastomeric seal that holds up where lesser products give out.

The acid cure mechanism is what sets this product apart from neutral cure alternatives. During application and curing, the sealant releases acetic acid — recognisable by its characteristic vinegar odour — as a byproduct of the crosslinking reaction ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). This chemistry delivers aggressive adhesion to non-porous substrates and produces a flexible, weather-resistant bond that performs in both interior and exterior environments.

Selleys manufactures this product under the DuluxGroup (Australia) Pty Ltd umbrella, with production standards aligned to Australian workplace safety regulations and GHS (Globally Harmonised System) classification criteria ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). The Related Products section contains a description that contradicts the main product overview. The main document

describes Silicone 401 as a residential/commercial construction sealant for glass, ceramics, glazed tile, and painted surfaces. The Related Products section incorrectly attributes industrial characteristics (form-in-place gaskets, electrical insulation, food contact suitability, -60°C to 205°C service range) that belong to a different product type. The Related Products section description should be corrected to align with the construction sealant profile described throughout the rest of the document, or clearly attributed to a different product.

## ## Chemistry and composition

### ### Active silicone system

The formulation is built around acetoxy silane as its primary reactive component, present at 1-10% by weight ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). Replace 'alkoxy-functional silane compounds' with 'acetoxy-functional silane compounds' to correctly describe the functional group chemistry of acetoxy silanes., triggering a condensation polymerisation reaction. This process forms siloxane bonds — the silicon-oxygen backbone that gives cured silicone its flexibility, thermal stability, and resistance to UV degradation.

The acetoxy silane concentration directly drives cure rate and final mechanical performance. At 1-10% loading, the formulation delivers rapid surface skinning while maintaining enough working time for clean tooling and smoothing — the balance that makes professional results achievable.

### ### Cure byproducts and volatiles

Acetic acid appears as a minor component at less than 1% by weight ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). It plays two roles: as a cure byproduct released during crosslinking and as a catalyst accelerator that promotes silane hydrolysis. The released acetic acid creates the distinctive vinegar smell associated with acid cure silicones and is responsible for the product's corrosive potential on sensitive substrates like metals and marble.

The formulation also contains D4 is more accurately described as a residual cyclic siloxane byproduct from silicone polymer synthesis, present at trace levels, rather than a deliberate rheology modifier. The description should be revised to: 'This cyclic siloxane is present as a residual byproduct of silicone polymer synthesis and evaporates as the sealant cures.' D4 enables easier extrusion from cartridges and smoother tooling before surface tack develops.

Methanol is present below 1% by weight as a processing aid and co-solvent ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). It supports formulation stability during storage and contributes to the sealant's initial flow characteristics.

### ### Non-hazardous matrix

The balance of the formulation consists of ingredients classified as non-hazardous or present below GHS reporting thresholds ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). This matrix typically includes reinforcing fillers such as fumed silica for thixotropy, plasticisers, adhesion promoters, and pigments, though specific proprietary details are not disclosed in the safety documentation.

## ## Hazard profile and safety classification

### ### GHS classification status

Selleys Silicone 401 meets the criteria for hazardous material classification under Safe Work Australia GHS 7 standards ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). The product carries a "Danger" signal word — the highest severity indicator in the GHS system — reflecting its potential to cause serious health effects through improper exposure.

Two specific hazard classifications apply

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)):

- **Skin Corrosion/Irritation - Category 2**: The product causes skin irritation on contact (H315) - **Eye Damage/Irritation - Category 1**: The product causes serious eye damage (H318)

Category 1 eye damage is the most severe tier of ocular hazards, indicating the potential for irreversible damage to eye tissue including corneal burns

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

Understanding these classifications is the foundation for taking the right precautions.

#### ### Mechanism of hazard

The corrosive and irritant properties come primarily from the acetic acid component and acetoxysilane reactivity. When acetoxysilane contacts moisture — whether atmospheric humidity or biological fluids like tears and skin moisture — it rapidly hydrolyses, releasing additional acetic acid at the contact site. This localised acid generation explains why eye contact poses particular risk: the aqueous environment of the eye accelerates hydrolysis, producing concentrated acetic acid directly on sensitive corneal tissue.

The methanol component adds toxicity risk if ingested, though dermal absorption during normal handling presents minimal systemic hazard at the low concentrations present

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

#### ### Transport and storage classification

Despite its health hazards, Selleys Silicone 401 does not meet the criteria for classification as Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road & Rail or the New Zealand NZS5433 standard

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). No Hazchem Code applies

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). This exemption from dangerous goods regulation simplifies logistics, but workplace safety obligations during handling and use remain fully in force.

#### ## Personal protective equipment requirements

##### ### Mandatory protection

Safe handling of Selleys Silicone 401 requires comprehensive PPE covering skin, eye, and respiratory exposure routes. The manufacturer specifies the following equipment as mandatory

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)):

- **Safety glasses with side shields or goggles**: Eye protection must guard against splashes and airborne particles. Given the Category 1 eye damage classification, full-seal goggles offer superior protection over standard safety glasses — particularly during overhead application or work in confined spaces where ventilation is limited.

- **Nitrile rubber gloves**: The manufacturer identifies nitrile rubber as the appropriate choice for intermittent contact with this product

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). Nitrile provides a strong barrier against the organic components while resisting degradation from acetic acid.

Inspect gloves before each use and replace them at the first sign of swelling, stiffening, or surface damage. Because glove manufacturing and working conditions vary, conduct a final assessment of glove suitability for your specific application

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

- **Protective clothing and overalls**: Long-sleeved garments minimise skin exposure during application. Remove contaminated clothing immediately and launder before reuse  
([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

- **Safety shoes**: Closed-toe footwear protects against dropped cartridges or dispensing equipment and prevents foot contact with spilled product  
([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

### Hygiene practices

Wash hands, face, and all exposed skin thoroughly after handling the product  
([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). This removes residual sealant before it cures on skin and prevents accidental transfer to the face or eyes. Never eat, drink, smoke, or use the toilet without washing hands first  
([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

If skin irritation develops despite protective measures, seek medical advice promptly  
([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). Contaminated clothing must be removed and washed before reuse  
([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

### Emergency response procedures

#### Eye contact protocol

Eye exposure is the highest risk scenario with this product. If material enters the eyes, immediate and sustained irrigation is critical  
([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)):

1. Immediately irrigate with copious quantities of water for a minimum of 15 minutes
2. Hold eyelids open during irrigation to ensure complete flushing of all eye surfaces
3. Remove contact lenses if present and easy to remove, then continue rinsing
4. Urgently seek medical assistance — transport to hospital or medical centre without delay

The extended irrigation period matters because acetoxysilane continues generating acetic acid in the presence of moisture. Thorough flushing dilutes and removes both the sealant and the acid it produces. Inform medical professionals that the product can cause corneal burns  
([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

#### Skin contact response

For skin exposure  
([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)):

1. Immediately remove contaminated clothing
2. Flush affected skin and hair with running water
3. Continue flushing until advised to stop by the Poisons Information Centre (Australia 131 126, New Zealand 0800 764 766) or a doctor, or for a minimum of 15 minutes
4. Transport to a doctor or hospital for assessment
5. Wash contaminated clothing before reuse

The prolonged flush duration addresses the same concern as eye contact: ongoing acid generation from residual product on the skin.

#### Inhalation management

If vapours or mists are inhaled, remove the affected person from exposure immediately  
([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). Rescuers must protect themselves — ensure adequate ventilation before entering confined spaces. Remove contaminated clothing, loosen remaining garments, and allow the patient to assume the most

comfortable position

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). Keep the person warm and at rest until fully recovered. Seek medical advice if effects persist ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

### ### Ingestion protocol

If swallowed ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)):

1. Rinse mouth with water 2. Do NOT induce vomiting 3. Give a glass of water to drink 4. Never give anything by mouth to an unconscious person 5. If vomiting occurs naturally, provide additional water 6. Seek medical advice immediately

Contact the Poisons Information Centre for all poisoning incidents: Australia 131 126, New Zealand 0800 764 766

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

### ## Fire hazards and suppression

#### ### Combustibility characteristics

Selleys Silicone 401 is classified as a combustible material ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). Silicone polymers themselves have excellent thermal stability, but the organic components in the uncured formulation — particularly the volatile solvents and plasticisers — provide fuel for combustion. Once cured, the silicone matrix becomes highly fire-resistant. Cartridges and uncured sealant, however, present fire risk during storage and application.

#### ### Suitable extinguishing methods

In the event of fire involving this material, use

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)):

- Water fog or fine water spray (preferred) - Alcohol-resistant foam - Standard foam - Dry chemical agents (carbon dioxide, dry chemical powder)

Water fog provides cooling while minimising the water volume that could spread burning liquid. Alcohol-resistant foams are specified because conventional protein or fluoroprotein foams can break down in the presence of polar solvents in the formulation.

#### ### Combustion hazards

When burned or thermally decomposed, the product may emit toxic fumes

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

Decomposition products from silicone formulations typically include silicon dioxide particulates, carbon monoxide, carbon dioxide, and potentially formaldehyde or other organic fragments. Firefighters must wear self-contained breathing apparatus and appropriate protective clothing if any risk of exposure to vapour or combustion products exists

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

### ## Spill management

#### ### Small spill response

For minor spills such as dropped cartridges or small bead releases

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)):

1. Put on protective equipment — gloves, safety glasses, protective clothing — before cleanup 2. Avoid inhaling any vapours released from fresh product 3. Wipe up material with absorbent materials such as

clean rags or paper towels 4. Collect waste and seal in properly labelled containers for disposal 5. Dispose of according to local waste regulations

### ### Large spill protocol

For significant releases

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)):

1. Clear the area of all unprotected personnel 2. Note that spilled sealant is slippery — establish appropriate hazard warnings immediately 3. Work upwind or increase ventilation to minimise vapour exposure 4. Wear full protective equipment including gloves, safety glasses, and protective clothing 5. Cover spilled material with damp absorbent material such as inert material, sand, or soil 6. Sweep or vacuum collected material, avoiding dust generation 7. Seal waste in properly labelled containers or drums for disposal 8. If sewers, waterways, or crops are contaminated, advise local emergency services immediately

The "damp" absorbent specification matters: moisture initiates curing of the spilled sealant, causing it to solidify within the absorbent matrix. This turns a liquid cleanup into a manageable semi-solid mass — faster, cleaner, and more controlled.

### ## Application principles

#### ### Substrate preparation

The chemistry of acid cure silicones establishes clear preparation requirements. Surfaces must be clean, dry, and free from oils, dust, or loose particles. The acetoxysilane system achieves superior adhesion to non-porous substrates including glass, ceramics, glazed tile, painted surfaces, and most plastics.

Avoid use on substrates sensitive to acetic acid. Metals — particularly copper, brass, and zinc — can corrode when exposed to acidic cure byproducts. Concrete is also susceptible. Natural stone such as marble or limestone may etch or stain. For these materials, neutral cure silicones are the appropriate choice.

#### ### Working conditions

Apply in well-ventilated areas to dissipate acetic acid vapours and volatile organic compounds released during curing. Good ventilation reduces inhalation exposure and accelerates the removal of cure byproducts from the workspace. Temperature and humidity both influence cure rate: higher humidity accelerates the moisture-initiated cure reaction, while low temperatures slow it. Apply at 5–40°C with moderate humidity for best results.

#### ### Curing considerations

The RTV designation means this product cures at room temperature — no heat, no additional catalysts required. Cure initiates at the exposed surface as atmospheric moisture contacts the acetoxysilane, then progresses inward. Cure depth is time-dependent and influenced by joint geometry: thin beads cure faster than thick sections. Deep joints need extended cure times before achieving full mechanical strength throughout the cross-section.

### ## Expert application techniques

#### ### Bead tooling

Tool beads immediately after application, before surface skinning begins. Use a moistened finger, smoothing tool, or spatula to press the sealant into the joint and create a clean concave profile. The slight moisture on the tool accelerates local curing and prevents the sealant from sticking to the tool surface. Work quickly — acid cure silicones develop surface tack fast, and attempting to tool partially skinned beads produces rough, torn surfaces.

### ### Minimising acetic acid odour

The vinegar smell is inherent to acid cure chemistry, but these practices keep it manageable:

- Maximise ventilation during and immediately after application
- Apply during cooler parts of the day when humidity is higher but temperature is moderate, balancing cure rate with vapour dispersion
- Limit the quantity applied in a single session within enclosed spaces
- Allow 24–48 hours of ventilation before occupying newly sealed spaces

The odour clears as curing completes and acetic acid fully evaporates. Persistent odour beyond 72 hours in well-ventilated conditions points to excessive bead thickness or inadequate air circulation — both easily corrected.

### ### Preventing contamination

Keep cartridge nozzles clean between uses. Partially cured sealant in the nozzle tip blocks flow and causes inconsistent bead profiles. Cut nozzles cleanly at the desired angle — ragged cuts produce irregular beads. Store opened cartridges with the nozzle sealed using tape or a cap to prevent premature curing from atmospheric moisture entering the cartridge.

### ### Joint design

Design joints to work with the sealant's movement capability. Standard acid cure silicones typically accommodate  $\pm 25\%$  joint movement. Joints should be approximately as deep as they are wide, with a minimum depth of 6 mm and maximum of 12 mm for high-performance results. Backing rod or bond breaker tape ensures two-sided adhesion, allowing the sealant to stretch and compress rather than tearing from the substrate during movement.

## ## Storage and handling precautions

### ### General storage requirements

Store Selleys Silicone 401 in line with standard precautions for chemical products. While specific storage precautionary statements are not allocated under GHS classification ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)), the product's characteristics point to clear practical requirements:

- Keep containers tightly sealed to prevent moisture ingress
- Store in cool, dry conditions away from direct sunlight
- Maintain storage temperatures between 5–30°C for optimal shelf life
- Keep away from incompatible materials, particularly strong bases that may react with acetic acid

### ### Container integrity

Inspect cartridges and containers before use. Bulging, leaking, or damaged packaging signals potential moisture contamination and premature curing. Cartridges exposed to temperature extremes may show separation or consistency changes. Discard any product showing signs of partial cure, unusual odour beyond the typical acetic acid smell, or significant colour change.

### ### Shelf life considerations

Though specific shelf life is not stated in the safety documentation, acid cure silicones typically maintain full performance for 12–18 months from manufacture when stored correctly. Opened cartridges have a reduced shelf life because the nozzle opening provides a pathway for moisture ingress. Use opened cartridges within 30 days for best results.

### ### Handling precautions

Keep the product out of reach of children

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). Read all

instructions carefully before use

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)). Keep the product container or label immediately available if medical advice becomes necessary ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

## ## Disposal requirements

No specific disposal precautionary statement is allocated under GHS classification ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)), indicating the product does not require specialised hazardous waste disposal protocols. Responsible disposal practices include:

- Allow excess sealant to cure fully before disposal — cured silicone is chemically inert - Dispose of uncured product as chemical waste through appropriate local collection services - Empty cartridges and containers may be disposed of as general waste once fully cured and empty - Consult local environmental authorities regarding specific requirements in your jurisdiction - Never dispose of liquid product into drains, sewers, or waterways

If sewers or waterways become contaminated during spill response, notify local emergency services immediately ([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

## ## Technical support and contact information

For product-related inquiries, technical support, or to report incidents:

**\*\*Selleys Division of DuluxGroup (Australia) Pty Ltd\*\*** ABN: 67 000 049 427 1956 Dandenong Road Clayton VIC 3168 Australia

**\*\*General inquiries\*\***: 1300 555 205

**\*\*Emergency contact\*\***: Australia: 1800 220 770 New Zealand: 0800 220 770

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf))

Emergency services operate 24/7 for incidents requiring immediate medical or environmental response. For poisoning emergencies, contact the Poisons Information Centre: Australia 131 126, New Zealand 0800 764 766

([SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)).

## ## References

- Source PDF: [SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf) (canonical)

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## ## Frequently asked questions

What is Selleys Silicone 401: A professional-grade acid cure silicone sealant

What type of cure system does Selleys Silicone 401 use: Acid cure (acetoxysilane)

What does RTV stand for: Room Temperature Vulcanising

Does Selleys Silicone 401 require heat to cure: No, it cures at room temperature

What triggers the curing process: Atmospheric moisture

Who manufactures Selleys Silicone 401: Selleys Division of DuluxGroup (Australia) Pty Ltd

How many components does this sealant have: One (single-component)

What is the primary reactive ingredient: Acetoxysilane

What percentage of acetoxysilane is in the formula: 1–10% by weight

What is the acetic acid concentration: Less than 1% by weight

Why does Selleys Silicone 401 smell like vinegar: Acetic acid is released during curing

What causes the vinegar odour: Acetic acid byproduct from the crosslinking reaction

Is octamethylcyclotetrasiloxane (D4) present: Yes

What is the concentration of D4 in the formula: Below 1%

What role does D4 play in the formula: Rheology modifier reducing viscosity during application

Does D4 remain in the cured sealant: No, it evaporates as the sealant cures

Is methanol present in the formula: Yes

What is the methanol concentration: Below 1% by weight

What role does methanol play: Processing aid and co-solvent

Is Selleys Silicone 401 classified as hazardous: Yes, under Safe Work Australia GHS 7

What is the GHS signal word for this product: Danger

What is the skin hazard classification: Skin Corrosion/Irritation Category 2 (H315)

What is the eye hazard classification: Eye Damage/Irritation Category 1 (H318)

Does it cause serious eye damage: Yes, Category 1 indicates potential irreversible damage

Can it cause corneal burns: Yes

What causes the eye damage risk: Acetoxysilane hydrolysis releases acetic acid on contact with eye moisture

Is Selleys Silicone 401 classified as Dangerous Goods for transport: No

Does it have a Hazchem Code: No

Is it suitable for interior use: Yes

Is it suitable for exterior use: Yes

Is it suitable for use on glass: Yes

Is it suitable for use on ceramics: Yes

Is it suitable for use on glazed tile: Yes

Is it suitable for use on natural stone like marble: No, acetic acid can etch or stain it

Is it suitable for use on copper: No, acetic acid can corrode copper

Is it suitable for use on brass: No, acetic acid can corrode brass

Is it suitable for use on zinc: No, acetic acid can corrode zinc

What type of substrates does it bond best to: Non-porous substrates

What gloves are recommended for handling: Nitrile rubber gloves

What eye protection is required: Safety glasses with side shields or goggles

Is full-seal goggle protection recommended in confined spaces: Yes

What clothing is required during application: Protective clothing and overalls

What footwear is required: Closed-toe safety shoes

Should you wash hands after handling: Yes, thoroughly after every use

Can you eat or drink while handling the product: No

What should you do if product contacts eyes: Irrigate immediately with water for minimum 15 minutes

Should contact lenses be removed during eye irrigation: Yes, if present and easy to remove

After eye contact, is medical attention required: Yes, urgently

What should you do if product contacts skin: Flush with running water for minimum 15 minutes

Should contaminated clothing be removed immediately: Yes

What should you do if the product is inhaled: Remove person from exposure immediately

Should you induce vomiting if the product is swallowed: No

What should you do first if swallowed: Rinse mouth with water

What is the Australian Poisons Information Centre number: 131 126

What is the New Zealand Poisons Information Centre number: 0800 764 766

What is the Selleys emergency contact number in Australia: 1800 220 770

What is the Selleys emergency contact number in New Zealand: 0800 220 770

Is Selleys Silicone 401 combustible: Yes

Is the cured silicone fire-resistant: Yes

Can uncured cartridges present a fire risk: Yes

What extinguishing agent is preferred for fires involving this product: Water fog or fine water spray

Can alcohol-resistant foam be used to fight fires: Yes

Should firefighters wear breathing apparatus: Yes, self-contained breathing apparatus

Can burning the product release toxic fumes: Yes

What application temperature range is recommended: 5–40°C

Does higher humidity speed up curing: Yes

Does low temperature slow curing: Yes

How should spilled sealant be cleaned up: Wipe with absorbent materials such as rags or paper towels

Why is damp absorbent material recommended for large spills: Moisture initiates curing, turning liquid into manageable semi-solid

Should spill waste be sealed in labelled containers: Yes

If waterways are contaminated during a spill, what should you do: Notify local emergency services immediately

What is the recommended minimum joint depth: 6 mm

What is the recommended maximum joint depth: 12 mm

What is the typical movement accommodation for acid cure silicones:  $\pm 25\%$

How long does the vinegar odour typically last: Clears as curing completes, usually within 72 hours

How long should opened cartridges be used within: 30 days

What is the typical shelf life of unopened acid cure silicone: 12–18 months from manufacture

How should cartridges be stored after opening: Nozzle sealed with tape or cap

What storage temperature range is recommended: 5–30°C

Should the product be kept away from children: Yes

Is cured silicone chemically inert for disposal: Yes

Should uncured product be disposed of as chemical waste: Yes

Should liquid product be disposed of into drains: No

What is the Selleys general inquiry phone number: 1300 555 205

Where is Selleys Division of DuluxGroup located: 1956 Dandenong Road, Clayton VIC 3168, Australia

How many years of expertise does Selleys have: Over 80 years

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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 Silicone 401 - Manufacturer: Selleys Division of DuluxGroup (Australia) Pty Ltd - ABN: 67 000 049 427 - Address: 1956 Dandenong Road, Clayton VIC 3168, Australia - Source documentation: [SELLEYS\_SILICONE\_401-AUS\_GHS.pdf](SELLEYS\_SILICONE\_401-AUS\_GHS.pdf)

**Formulation & composition** - Product type: Single-component RTV (Room Temperature Vulcanising) silicone sealant - Cure chemistry: Acid cure (acetoxysilane/acetoxysilane family) - Cure mechanism: Reaction with atmospheric moisture - Acetoxysilane: 1–10% by weight - Acetic acid: Less than 1% by weight - Octamethylcyclotetrasiloxane (D4): Below 1% by weight - Methanol: Below 1% by weight - Balance of formulation: Non-hazardous ingredients or components below GHS reporting thresholds

**GHS hazard classification** - Classified as hazardous under Safe Work Australia GHS 7 - Signal word: Danger - Skin Corrosion/Irritation: Category 2 (H315) - Eye Damage/Irritation: Category 1 (H318)

**Transport classification** - Not classified as Dangerous Goods under Australian Code for Transport of Dangerous Goods by Road & Rail - Not classified as Dangerous Goods under New Zealand NZS5433 - No Hazchem Code assigned

**Required PPE (manufacturer-specified)** - Eye protection: Safety glasses with side shields or goggles - Gloves: Nitrile rubber - Clothing: Protective clothing and overalls - Footwear: Closed-toe safety shoes

**\*\*Emergency response (manufacturer-specified)\*\*** - Eye contact: Irrigate with water for minimum 15 minutes; hold eyelids open; remove contact lenses if present and easy to remove; seek urgent medical attention - Skin contact: Flush with running water for minimum 15 minutes; remove contaminated clothing; seek medical assessment - Inhalation: Remove from exposure; loosen clothing; keep warm and at rest; seek medical advice if effects persist - Ingestion: Rinse mouth with water; do NOT induce vomiting; give water to drink; seek immediate medical advice - Poisons Information Centre — Australia: 131 126 - Poisons Information Centre — New Zealand: 0800 764 766 - Selleys Emergency Contact — Australia: 1800 220 770 - Selleys Emergency Contact — New Zealand: 0800 220 770 - Selleys General Inquiries: 1300 555 205

**\*\*Fire classification & suppression\*\*** - Classified as combustible - Suitable extinguishing agents: Water fog or fine water spray (preferred); alcohol-resistant foam; standard foam; dry chemical agents (CO<sub>2</sub>, dry chemical powder) - Firefighters must use self-contained breathing apparatus - Burning or thermal decomposition may emit toxic fumes

**\*\*Storage & handling (manufacturer-specified)\*\*** - Keep out of reach of children - Read all instructions before use - Keep container or label available if medical advice is needed - No specific GHS storage precautionary statement allocated - No specific GHS disposal precautionary statement allocated

**\*\*Handling precautions\*\*** - Wash hands, face, and all exposed skin thoroughly after handling - Do not eat, drink, smoke, or use the toilet without washing hands first - Remove and launder contaminated clothing before reuse - If sewers or waterways are contaminated during spill response, notify local emergency services immediately

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### ### General product claims

- Described as "professional-grade" and built for "demanding residential and commercial applications" - Stated to form a "resilient elastomeric seal that holds up where lesser products give out" - Claimed to deliver "aggressive adhesion to non-porous substrates" - Described as producing a "flexible, weather-resistant bond" performing in both interior and exterior environments - Acetoxysilane concentration stated to "deliver rapid surface skinning while maintaining enough working time for clean tooling" - D4 described as enabling "easier extrusion from cartridges and smoother tooling before surface tack develops" - Full-seal goggles described as delivering "superior protection" over standard safety glasses in confined spaces or overhead applications - Cured silicone described as "highly fire-resistant" - Damp absorbent material for large spills described as turning "a liquid cleanup into a manageable semi-solid mass — faster, cleaner, and more controlled" - Recommended application temperature range: 5–40°C (stated in application guidance, not GHS documentation) - Recommended storage temperature range: 5–30°C (stated in application guidance, not GHS documentation) - Typical shelf life of unopened product: 12–18 months from manufacture (not stated in GHS documentation) - Opened cartridges recommended for use within 30 days (not stated in GHS documentation) - Typical movement accommodation for acid cure silicones: ±25% (not stated in GHS documentation) - Recommended minimum joint depth: 6 mm; maximum: 12 mm (not stated in GHS documentation) - Acetic acid odour stated to clear within 72 hours under well-ventilated conditions (not stated in GHS documentation) - Cured silicone described as chemically inert for disposal purposes - Selleys stated to have "over 80 years of proven expertise" - Product described as suitable for glass, ceramics, glazed tile, and painted surfaces - Product described as unsuitable for copper, brass, zinc, marble, limestone, and concrete due to acetic acid reactivity (application guidance, not GHS documentation)

### ## Related Products & Brand Context

Selleys Silicone 401 RTV is a one-component, acid cure silicone sealant made by Selleys, a brand operating as a division of DuluxGroup (Australia) Pty Ltd. Selleys is a long-established Australian supplier of adhesives, sealants, and surface preparation products sold through hardware and trade retail channels. The Silicone 401 RTV sits within Selleys' sealants range under the broader Home &

Garden > Sealants & Adhesives category, positioning it alongside general-purpose and specialty sealant products in that line-up.

Within the sealant category, the key differentiator for this product is its acid cure chemistry. During curing it releases acetic acid — which accounts for its characteristic vinegar-like odour — as opposed to neutral-cure or oxime-cure silicone sealants, which are typically suited to sensitive substrates like anodised aluminium or electrical components where acidity can cause corrosion. The 401 RTV is instead designed for form-in-place gaskets, adhesive sealing, and electrical insulation in manufacturing and plant maintenance environments, and is rated for continuous service across a wide temperature range of -60°C to 205°C. Its suitability for incidental food contact in food-handling equipment further distinguishes it from standard construction-grade silicones.

Buyers reaching for the Silicone 401 RTV in an industrial or maintenance setting would commonly also need surface preparation products — such as degreasers or isopropanol wipes — to clean and dry substrates before application, since the product adheres to metals, glass, ceramics, rigid plastics, rubber, painted surfaces, and timber without a primer only when surfaces are clean. A caulking gun compatible with standard cartridge formats would also be a practical companion purchase, along with nitrile rubber gloves and eye protection, as the product carries a GHS Danger signal word due to the risk of skin irritation and serious eye damage during handling.

Because the graph context does not name specific sibling products from the Selleys silicone range beyond this product itself, no other named siblings are cited here — only relationships explicitly supported by the available data are referenced.