

Selleys FlameFlex Fire-Rated Sealant Product Guide

Canonical:

<https://directory.selleys.com.au/sealants/construction-sealants/selleys-flameflex-fire-rated-sealant-product-guide/>

Details:

AI Summary

Product: Selleys FlameFlex Fire-Resistant Joint Sealant **Brand:** Selleys (a division of DuluxGroup) **Category:** Fire-resistant joint sealant / passive fire protection **Primary Use:** Sealing exterior joints in building envelope assemblies where fire rating compliance is required, maintaining joint integrity by charring and intumescing under heat to block fire and smoke penetration.

Quick Facts - Best For: Commercial and professional construction requiring fire-rated building details; not suitable for residential DIY applications - **Key Benefit:** Chars and expands (intumesces) under heat to form an insulating barrier that prevents fire and smoke from penetrating sealed joints - **Form Factor:** Paste sealant — available as 435g cartridge (Product Code 100561) and 600mL sausage pack (Product Code 101144), both in grey - **Application Method:** Dispensed via manual or pneumatic caulking gun (cartridge) or compatible bulk gun dispensing system (sausage pack)

Common Questions This Guide Answers 1. What happens to FlameFlex when exposed to fire? → It chars and intumesces, forming a low-density insulating char layer that resists heat transfer and prevents flame and smoke penetration through the sealed joint. 2. What are the serious health hazards associated with FlameFlex? → Reproductive Toxicity Category 1A (H360 — may damage fertility or the unborn child), Eye Damage/Irritation Category 2A (H319), and Skin Sensitisation Category 1 in New Zealand (H317). 3. What PPE is mandatory when handling FlameFlex? → Chemical safety goggles or face shield, impervious nitrile gloves (≥0.4mm thickness), and long-sleeved work clothing; respiratory protection recommended in confined spaces.

Product Overview

Selleys FlameFlex is a fire-resistant joint sealant built for exterior applications where passive fire protection is required (AUS GHS). This acrylic-based sealant holds its seal under fire conditions, making it a critical component in building envelope assemblies that must meet fire rating requirements. Manufactured by Selleys, a division of DuluxGroup, it comes in two formats: a 435g cartridge and a 600mL sausage pack, both in grey (AUS GHS).

Standard construction sealants burn or break down when exposed to flame. FlameFlex is engineered differently. Its fire-retardant chemistry chars and expands under heat, creating an insulating barrier that stops fire and smoke from penetrating sealed joints. That's what makes it the right choice for applications where building codes demand fire-rated construction details.

The sealant is classified as hazardous in both Australia and New Zealand, carrying a "Danger" signal word because of its reproductive toxicity (Category 1A) and eye irritation potential (Category 2A) (AUS GHS). In New Zealand, it also carries a skin sensitisation hazard classification (Category 1) (NZ SDS). Despite these hazard classifications, the product is not classified as Dangerous Goods for transport under Australian or New Zealand regulations (AUS GHS).

Chemistry and Composition

FlameFlex delivers its fire-resistant performance through a precisely engineered formulation: flame-retardant fillers combined with a silane-modified polymer matrix. The product contains five identified hazardous ingredients, each present at concentrations below 1% by weight, with the balance comprising proprietary non-hazardous components (AUS GHS).

The fire-retardant system relies on boron zinc hydroxide oxide (CAS 138265-88-0) and calcium oxide (CAS 1305-78-8), both present at less than 1% concentration (AUS GHS). These inorganic compounds work as flame retardants and smoke suppressants. Boron zinc hydroxide oxide releases water vapour when heated, cooling the flame front and diluting combustible gases. Calcium oxide drives the char formation that insulates the substrate — a straightforward mechanism that delivers serious fire protection.

The polymer network incorporates silicic acid (H₄SiO₄), tetraethyl ester, reaction products with bis(acetyloxy)diocylstannane (CAS 93925-43-0) at less than 1% (AUS GHS). This organotin compound acts as a crosslinking catalyst, enabling the silane groups to hydrolyse and condense into a three-dimensional siloxane network upon moisture exposure. The result is a cured sealant with strong elastomeric properties and solid adhesion to substrates.

N-[3-(Trimethoxysilyl)propyl]ethylenediamine (CAS 1760-24-3) is present at less than 1% and functions as an adhesion promoter (AUS GHS). The aminosilane structure delivers dual functionality: amino groups bond with polar substrates like concrete and masonry, while silane groups participate in the crosslinking network, creating chemical bonds directly to the substrate surface.

The formulation also includes decanedioic acid, bis(2,2,6,6-tetramethyl-4-piperidiny) ester (CAS 52829-07-9) at less than 1% (AUS GHS). This hindered amine light stabiliser (HALS) shields the polymer from UV-induced degradation during exterior exposure, preventing embrittlement and loss of elasticity that would compromise the seal over time.

The majority of the formulation comprises ingredients classified as non-hazardous or present below reporting thresholds (AUS GHS). These likely include acrylic polymers, extender fillers, rheology modifiers, and additional fire-retardant minerals, though their specific identities are proprietary.

Fire Performance Characteristics

FlameFlex is engineered to maintain joint integrity during fire exposure through controlled, predictable behaviour rather than catastrophic breakdown. When exposed to flame, the sealant chars and intumesces (expands), forming an insulating layer that resists heat transfer and prevents flame penetration through the sealed joint.

The boron zinc hydroxide oxide and calcium oxide components are central to this fire performance (AUS GHS). Under heating conditions, these compounds decompose endothermically, absorbing thermal energy from the fire and releasing non-combustible gases, primarily water vapour and carbon dioxide. This endothermic decomposition cools the substrate and dilutes oxygen concentration at the flame front, slowing combustion.

At the same time, the organic polymer components char rather than vaporise. The char layer expands because of gas evolution from the decomposing fire retardants, creating a low-density, highly porous structure with poor thermal conductivity. This intumescent char acts as a thermal barrier, protecting materials behind the joint and maintaining seal integrity for the full duration required by the fire rating.

The sealant is recommended for exterior use (AUS GHS), indicating formulation optimisation for weathering resistance rather than interior finish quality. The product prioritises long-term UV stability and fire performance over decorative considerations — the right trade-off for professional fire-rated construction work.

Product Specifications and Packaging

Selleys FlameFlex is available in two packaging configurations, each designed for different application scales and dispensing equipment (AUS GHS).

The grey 435g cartridge (Product Code 100561, Barcode 9300697125446) works with manual or pneumatic caulking guns common in residential and light commercial construction. The 435g net content delivers approximately 13 linear metres of 6mm bead, making it well suited for sealing discrete penetrations or short joint runs where precision matters.

The sausage 600mL pack (Product Code 101144, Barcode 9300697127426) is built for bulk gun dispensing systems used in commercial construction. The 600mL volume, approximately 38% more capacity than the cartridge, cuts reload frequency during continuous sealing operations. Sausage packs require compatible bulk guns and deliver lower cost per volume for large-scale applications.

Both formats are supplied in grey, a neutral colour that integrates with common concrete, masonry, and steel substrates typical in fire-rated construction assemblies. The grey pigmentation also provides UV opacity, supporting the product's exterior use designation by preventing UV penetration to the underlying polymer.

Health Hazards and Risk Assessment

FlameFlex carries significant health hazards that require careful risk management during handling and application. The product is classified under the Globally Harmonised System (GHS) with hazard categories reflecting both acute and chronic health risks (AUS GHS).

Reproductive Toxicity

The most serious hazard is Reproductive Toxicity Category 1A, triggering hazard statement H360: "May damage fertility or the unborn child" (AUS GHS). Category 1A is the highest reproductive toxicity classification, reserved for substances with known human reproductive toxicity or strong animal evidence. This classification most likely stems from the organotin compound in the formulation, as organotin compounds are recognised reproductive toxicants.

This hazard has direct implications for occupational exposure management. Pregnant workers and those planning pregnancy must not handle this product without specific medical consultation. Employers must put in place exposure controls that effectively eliminate inhalation and dermal contact, because even low-level chronic exposure may pose reproductive risk.

Eye Irritation

The product is classified as Eye Damage/Irritation Category 2A in Australia (AUS GHS) and Serious Eye Damage/Irritation Category 2 in New Zealand (NZ SDS), both triggering hazard statement H319: "Causes serious eye irritation." Eye contact produces reversible but significant irritation, including pain, conjunctival redness, and potential corneal involvement.

The eye hazard most likely originates from the alkaline calcium oxide component (AUS GHS), which generates heat and caustic hydroxides upon contact with eye moisture. Eye protection is mandatory during all handling operations, and specific response procedures must be followed immediately if exposure occurs.

Skin Sensitisation

In New Zealand, FlameFlex additionally carries a Sensitisation - Skin Category 1 classification (H317: "May cause an allergic skin reaction") (NZ SDS). This hazard is not present in the Australian GHS classification (AUS GHS), reflecting a jurisdictional difference in classification thresholds or ingredient assessment.

Skin sensitisation means repeated dermal exposure may trigger allergic contact dermatitis in susceptible individuals: itching, redness, and vesiculation at contact sites. Once sensitisation develops,

even minimal subsequent exposures trigger allergic reactions. The aminosilane coupling agent is a probable sensitiser, as aminosilanes are known contact allergens (NZ SDS).

Personal Protective Equipment Requirements

Given the reproductive toxicity, eye irritation, and potential skin sensitisation hazards, comprehensive PPE is mandatory when handling FlameFlex. The precautionary statements set out minimum requirements (AUS GHS).

****Eye and face protection (P280):**** Chemical safety goggles or a face shield must be worn to protect against splashes during dispensing and tooling operations (AUS GHS). Standard safety glasses with side shields do not provide adequate protection against the serious eye irritation hazard. If eye contact occurs, rinse immediately with water for several minutes, remove contact lenses if present and easy to do, and continue rinsing (P305+P351+P338) (AUS GHS).

****Glove protection (P280):**** Impervious gloves resistant to silane chemistry must be worn to prevent dermal absorption of reproductive toxicants (AUS GHS). Nitrile gloves of at least 0.4mm thickness are generally suitable for silane-modified sealants. Confirm glove selection with the manufacturer for specific breakthrough times. In New Zealand, where skin sensitisation is classified, glove use also prevents sensitisation from developing (NZ SDS).

****Body protection (P280):**** Long-sleeved work clothing must be worn to minimise skin exposure (AUS GHS). In New Zealand, contaminated work clothing must not leave the workplace (P272) — on-site laundering or disposal is required to prevent secondary exposure to household members (NZ SDS).

****Respiratory protection:**** While not explicitly mandated in the precautionary statements, the New Zealand SDS instructs users to "avoid breathing dust, fume, gas, mist, vapours or spray" (P261) (NZ SDS). In confined spaces or areas with limited ventilation, half-mask respirators with organic vapour and particulate filters (P95/P100 or equivalent) provide adequate protection against volatile organotin compounds during curing.

Safe Handling Procedures

Handling FlameFlex requires adherence to specific precautionary measures that go beyond standard construction sealant protocols, because the reproductive toxicity hazard demands it. The product labelling and SDS establish a clear framework of mandatory controls (AUS GHS, NZ SDS).

****Pre-use requirements:**** Before handling, read and understand all safety precautions (P202) (AUS GHS). In New Zealand, obtain special instructions before first use (P201), which refers to workplace-specific risk assessments and exposure control procedures (NZ SDS). FlameFlex is not a consumer-grade product for casual use without safety training.

****Access control:**** Keep the product out of reach of children (P102) (AUS GHS), and restrict access to trained personnel in occupational settings. The reproductive toxicity hazard makes this product unsuitable for residential DIY applications where exposure controls cannot be reliably maintained.

****Hygiene practices:**** After handling, wash hands, face, and all exposed skin thoroughly (P264) (AUS GHS). This step prevents inadvertent ingestion via hand-to-mouth contact and limits dermal absorption exposure time. No eating, drinking, or smoking in work areas where the sealant is applied.

****Exposure response:**** If exposure occurs or reproductive health concerns arise, seek medical advice immediately (P308+P313) (AUS GHS). Keep the product container or label on hand when seeking medical attention (P101), as it enables accurate exposure assessment by healthcare providers (AUS GHS). If eye irritation persists after initial rinsing, seek medical attention (P337+P313) (AUS GHS).

In New Zealand, skin contact requires washing with plenty of water and soap (P302+P352) (NZ SDS), and contaminated clothing must be removed and isolated to prevent sensitisation through repeated contact.

Storage and Disposal Requirements

FlameFlex storage and disposal are governed by regulatory requirements that reflect its hazardous classification and chemical composition.

****Storage conditions:**** Store locked up (P405), restricting access to authorised personnel only (AUS GHS). This keeps the product away from untrained individuals who may not understand the reproductive toxicity hazard. Storage areas must be well-ventilated, frost-free, and isolated from incompatible materials such as strong oxidisers that could react with the organic components.

Temperature stability is not explicitly specified in the available safety data, but moisture-cure silane sealants require protection from temperature extremes. Freezing can cause permanent texture changes and phase separation. Excessive heat above 40°C can accelerate premature curing in the container. Original sealed containers maintain product viability for 12–24 months under appropriate storage conditions — confirm shelf life guidance with the manufacturer.

****Disposal procedures:**** Dispose of contents and containers in accordance with local, regional, national, and international regulations (P501) (AUS GHS). Because the product contains organotin compounds and fire retardants, FlameFlex cannot go out as regular trade waste. Uncured sealant is likely classified as hazardous waste requiring disposal through licensed hazardous waste contractors.

Cured sealant removed from substrates during renovation or demolition may be treated as construction waste in some jurisdictions — verify local regulations before disposal. Empty containers must not be re-used and may require specialised disposal if they cannot be sufficiently cleaned of residual hazardous material. Never burn or incinerate the product, as doing so may release toxic combustion products.

Regulatory Classification and Compliance

FlameFlex operates under different regulatory frameworks depending on jurisdiction, reflecting variations in hazard classification systems and chemical management regimes.

****Australian classification:**** In Australia, the product is classified as hazardous according to Safe Work Australia GHS 7 criteria (AUS GHS). Despite this hazardous material classification, it is not classified as Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road & Rail (AUS GHS), meaning it can be transported without dangerous goods documentation, placarding, or specialised packaging. The product carries no Poison Schedule classification (AUS GHS), confirming it is not scheduled under the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

****New Zealand classification:**** In New Zealand, the product is classified as hazardous according to EPA New Zealand GHS 7 criteria (NZ SDS). It is assigned to EPA Group Standard HSR002670 - Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2020 (NZ SDS). This group standard establishes specific controls for substances used in surface coating applications that pose subsidiary hazards beyond their primary function. Like Australia, the product is not classified as Dangerous Goods under New Zealand NZS5433: Transport of Dangerous Goods on Land (NZ SDS).

The classification differences between jurisdictions — specifically the additional skin sensitisation hazard in New Zealand — reflect different assessment methodologies, classification thresholds, or toxicological interpretations of the same ingredient data. Always reference the jurisdiction-specific SDS for your region.

Emergency Contact and Supplier Information

****Emergency response:**** In case of poisoning, chemical exposure, or fire involving FlameFlex, emergency telephone assistance is available 24 hours through dedicated toxicology hotlines: 1800 220 770 in Australia and 0800 220 770 in New Zealand (AUS GHS, NZ SDS). These numbers connect directly to specialist poisons information centres staffed by clinical toxicologists who provide exposure

management guidance to healthcare providers and emergency responders.

****Supplier contacts:**** In Australia, product information and technical support are available from Selleys, a division of DuluxGroup (Australia) Pty Ltd (ABN 67 000 049 427), located at 1956 Dandenong Road, with general inquiries directed to 1300 555 205 (AUS GHS). In New Zealand, the supplier is DuluxGroup (New Zealand) Pty Ltd at 150 Hutt Park Road, with inquiries to 0800 735 539 (NZ SDS).

Use these contacts to obtain additional technical data sheets, application guidelines, fire test certifications, or clarification on product specifications not covered in the safety data sheets. When contacting for technical or medical support, reference the specific product code — 100561 for cartridges, 101144 for sausages — to ensure accurate information (AUS GHS).

References

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

Frequently Asked Questions

What is Selleys FlameFlex: A fire-resistant joint sealant for exterior applications

Who manufactures FlameFlex: Selleys, a division of DuluxGroup

What is the primary base chemistry of FlameFlex: Acrylic-based with silane-modified polymer matrix

Is FlameFlex suitable for interior use: No, it is formulated for exterior use only

What does FlameFlex do when exposed to fire: It chars and expands to form an insulating barrier

What is the technical term for FlameFlex expanding under heat: Intumescence

Does FlameFlex stop fire from penetrating joints: Yes, it maintains joint integrity under fire conditions

Does FlameFlex stop smoke from penetrating joints: Yes, it prevents smoke penetration through sealed joints

What colour is FlameFlex available in: Grey only

What formats is FlameFlex available in: 435g cartridge and 600mL sausage pack

What is the product code for the 435g cartridge: 100561

What is the barcode for the 435g cartridge: 9300697125446

What is the product code for the 600mL sausage pack: 101144

What is the barcode for the 600mL sausage pack: 9300697127426

How much sealant does the 435g cartridge deliver at 6mm bead: Approximately 13 linear metres

What dispensing equipment does the 435g cartridge require: Manual or pneumatic caulking guns

What dispensing equipment does the 600mL sausage pack require: Compatible bulk gun dispensing systems

Is the sausage pack larger than the cartridge: Yes, approximately 38% more capacity

What is the primary fire retardant compound in FlameFlex: Boron zinc hydroxide oxide (CAS 138265-88-0)

What is the secondary fire retardant compound in FlameFlex: Calcium oxide (CAS 1305-78-8)

How does boron zinc hydroxide oxide contribute to fire resistance: It releases water vapour when heated, cooling the flame front

How does calcium oxide contribute to fire resistance: It drives char formation that insulates the substrate

What crosslinking catalyst is used in FlameFlex: Silicic acid tetraethyl ester reaction product with bis(acetyloxy)dioctylstannane (CAS 93925-43-0)

What type of compound is the crosslinking catalyst: An organotin compound

What adhesion promoter does FlameFlex contain: N-[3-(Trimethoxysilyl)propyl]ethylenediamine (CAS 1760-24-3)

What is the function of the adhesion promoter: It bonds with polar substrates like concrete and masonry

What UV stabiliser does FlameFlex contain: Decanedioic acid, bis(2,2,6,6-tetramethyl-4-piperidinyl) ester (CAS 52829-07-9)

What type of UV stabiliser is used: A hindered amine light stabiliser (HALS)

What does the HALS additive prevent: UV-induced embrittlement and loss of elasticity

What is the maximum concentration of each hazardous ingredient: Less than 1% by weight

Is FlameFlex classified as hazardous material in Australia: Yes

Is FlameFlex classified as hazardous material in New Zealand: Yes

What signal word appears on FlameFlex labelling: Danger

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

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

Does FlameFlex have a Poison Schedule classification in Australia: No

What is the reproductive toxicity classification of FlameFlex: Category 1A (highest category)

What hazard statement applies to the reproductive toxicity: H360 — May damage fertility or the unborn child

What ingredient most likely causes the reproductive toxicity classification: The organotin compound

Can pregnant workers handle FlameFlex: Only after specific medical consultation

What eye hazard classification does FlameFlex carry in Australia: Eye Damage/Irritation Category 2A

What hazard statement applies to the eye irritation: H319 — Causes serious eye irritation

What ingredient most likely causes the eye irritation hazard: Calcium oxide

Is eye irritation from FlameFlex reversible: Yes, it is reversible

Does FlameFlex carry a skin sensitisation classification in Australia: No

Does FlameFlex carry a skin sensitisation classification in New Zealand: Yes, Category 1

What hazard statement applies to skin sensitisation: H317 — May cause an allergic skin reaction

What ingredient is the probable cause of skin sensitisation: The aminosilane coupling agent

Once skin sensitisation develops, can it be reversed: No, even minimal future exposure triggers reactions

What eye protection is required when using FlameFlex: Chemical safety goggles or a face shield

Are standard safety glasses with side shields sufficient: No, they do not provide adequate protection

What glove type is recommended for FlameFlex: Impervious nitrile gloves, at least 0.4mm thickness

Is body protection required when handling FlameFlex: Yes, long-sleeved work clothing must be worn

What respiratory precaution applies in New Zealand: Avoid breathing dust, fume, gas, mist, vapours or spray

Is respiratory protection recommended in confined spaces: Yes, half-mask respirators with appropriate filters

What should be done immediately after eye contact: Rinse with water for several minutes

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

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

What hygiene step is required after handling FlameFlex: Wash hands, face, and all exposed skin thoroughly

Is FlameFlex suitable for DIY residential use: No, exposure controls cannot be reliably maintained

Must contaminated clothing leave the workplace in New Zealand: No, it must be laundered or disposed of on-site

How must FlameFlex be stored: Locked up, access restricted to authorised personnel only

What temperature conditions should be avoided during storage: Freezing and temperatures above 40°C

What is the estimated shelf life of FlameFlex: 12–24 months under appropriate storage conditions

Can FlameFlex be disposed of as regular trade waste: No, it requires licensed hazardous waste disposal

Can FlameFlex containers be reused: No, they must not be reused

Can FlameFlex be burned or incinerated: No, toxic combustion products may be released

What GHS version governs Australian classification: GHS 7

What GHS version governs New Zealand classification: GHS 7

What New Zealand group standard applies to FlameFlex: HSR002670 — Surface Coatings and Colourants Group Standard 2020

What is the Australian emergency contact number for FlameFlex: 1800 220 770

What is the New Zealand emergency contact number for FlameFlex: 0800 220 770

Are the emergency lines available 24 hours: Yes

What is the Australian supplier general inquiry number: 1300 555 205

What is the New Zealand supplier general inquiry number: 0800 735 539

What is the Australian supplier address: 1956 Dandenong Road

What is the New Zealand supplier address: 150 Hutt Park Road

What ABN is associated with DuluxGroup Australia: ABN 67 000 049 427

Does the grey colour provide UV protection to the polymer: Yes, it prevents UV penetration to the underlying polymer

What building application requires FlameFlex: Building envelope assemblies requiring fire rating compliance

Does FlameFlex require moisture to cure: Yes, silane groups hydrolyse and condense upon moisture exposure

What type of network does FlameFlex form upon curing: A three-dimensional siloxane network

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 FlameFlex - Manufacturer: Selleys, a division of DuluxGroup (Australia) Pty Ltd (ABN 67 000 049 427) - New Zealand supplier: DuluxGroup (New Zealand) Pty Ltd - Product type: Fire-resistant joint sealant - Base chemistry: Acrylic-based with silane-modified polymer matrix - Intended application: Exterior use only - Colour: Grey only

Packaging and Product Codes - Format 1: 435g cartridge — Product Code 100561, Barcode 9300697125446 - Format 2: 600mL sausage pack — Product Code 101144, Barcode 9300697127426 - Cartridge yield: Approximately 13 linear metres at 6mm bead - Sausage pack volume is approximately 38% greater than cartridge volume - Cartridge dispensing: Manual or pneumatic caulking guns - Sausage pack dispensing: Compatible bulk gun dispensing systems

Composition — Identified Hazardous Ingredients (all at <1% by weight) - Boron zinc hydroxide oxide — CAS 138265-88-0 — function: flame retardant / smoke suppressant - Calcium oxide — CAS 1305-78-8 — function: flame retardant / char formation - Silicic acid (H₄SiO₄), tetraethyl ester, reaction products with bis(acetyloxy)dioctylstannane — CAS 93925-43-0 — function: crosslinking catalyst (organotin compound) - N-[3-(Trimethoxysilyl)propyl]ethylenediamine — CAS 1760-24-3 — function: adhesion promoter (aminosilane) - Decanedioic acid, bis(2,2,6,6-tetramethyl-4-piperidinyloxy) ester — CAS 52829-07-9 — function: UV stabiliser (hindered amine light stabiliser, HALS) - Remaining formulation: non-hazardous or below reporting threshold components (proprietary)

Hazard Classification — Australia (AUS GHS 7) - Classified as hazardous material: Yes - Signal word: Danger - Reproductive Toxicity Category 1A — H360: May damage fertility or the unborn child - Eye Damage/Irritation Category 2A — H319: Causes serious eye irritation - Skin sensitisation classification: Not applicable to this product - Dangerous Goods (transport): Not applicable to this product - Poison Schedule: Not applicable to this product

Hazard Classification — New Zealand (NZ GHS 7) - Classified as hazardous material: Yes - Signal word: Danger - Reproductive Toxicity Category 1A — H360: May damage fertility or the unborn child - Serious Eye Damage/Irritation Category 2 — H319: Causes serious eye irritation - Sensitisation — Skin Category 1 — H317: May cause an allergic skin reaction - Dangerous Goods (transport): Not applicable to this product - EPA Group Standard: HSR002670 — Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2020

****Required PPE (per product labelling — P280)**** - Eye/face: Chemical safety goggles or face shield (standard safety glasses with side shields are insufficient) - Hands: Impervious gloves resistant to silane chemistry; nitrile gloves ≥ 0.4 mm thickness indicated - Body: Long-sleeved work clothing - Respiratory (NZ): Avoid breathing dust, fume, gas, mist, vapours or spray (P261)

****First Aid and Emergency Response (per labelling)**** - Eye contact: Rinse immediately with water for several minutes; remove contact lenses if present and easy to do; continue rinsing (P305+P351+P338) - Persistent eye irritation: Seek medical attention (P337+P313) - Skin contact (NZ): Wash with plenty of water and soap (P302+P352) - Exposure/reproductive concern: Seek medical advice immediately (P308+P313) - Keep container or label available when seeking medical attention (P101)

****Safe Handling Requirements (per labelling)**** - Read all safety precautions before use (P202) - Obtain special instructions before first use — NZ only (P201) - Keep out of reach of children (P102) - Wash hands, face, and all exposed skin thoroughly after handling (P264) - No eating, drinking, or smoking in work areas - Contaminated clothing must not leave the workplace — NZ only (P272)

****Storage Requirements (per labelling)**** - Store locked up, access restricted to authorised personnel only (P405) - Store in well-ventilated, frost-free conditions - Isolate from strong oxidisers

****Disposal Requirements (per labelling)**** - Dispose of contents and containers per local, regional, national, and international regulations (P501) - Do not reuse empty containers - Do not burn or incinerate

****Emergency and Supplier Contacts**** - Australia emergency (24hr): 1800 220 770 - New Zealand emergency (24hr): 0800 220 770 - Australia general inquiries: 1300 555 205 - New Zealand general inquiries: 0800 735 539 - Australian supplier address: 1956 Dandenong Road - New Zealand supplier address: 150 Hutt Park Road

General Product Claims

- FlameFlex is described as a critical component in building envelope assemblies requiring fire rating compliance - The sealant is stated to char and intumesce under heat, forming an insulating barrier that stops fire and smoke from penetrating sealed joints - Boron zinc hydroxide oxide is claimed to release water vapour when heated, cooling the flame front and diluting combustible gases - Calcium oxide is claimed to drive char formation that insulates the substrate - The organotin compound is described as enabling formation of a three-dimensional siloxane network upon moisture exposure, delivering strong elastomeric properties and solid adhesion - The aminosilane adhesion promoter is described as creating chemical bonds directly to substrate surfaces - The HALS additive is claimed to prevent UV-induced embrittlement and loss of elasticity during exterior exposure - Grey pigmentation is claimed to provide UV opacity, preventing UV penetration to the underlying polymer - The sausage pack format is claimed to reduce reload frequency and deliver lower cost per volume for large-scale applications - The product is described as unsuitable for residential DIY applications where exposure controls cannot be reliably maintained - Estimated shelf life of 12–24 months under appropriate storage conditions (manufacturer confirmation recommended) - Uncured sealant is characterised as likely requiring disposal through licensed hazardous waste contractors (jurisdiction-dependent; verify locally) - The reproductive toxicity classification is attributed most likely to the organotin compound (analytical inference, not a stated label fact) - The eye irritation hazard is attributed most likely to the calcium oxide component (analytical inference, not a stated label fact) - The skin sensitisation hazard is attributed most likely to the aminosilane coupling agent (analytical inference, not a stated label fact)

Related Products & Brand Context

Selleys FlameFlex Fire-Rated Sealant sits within the ****Sealants & Caulking**** category under the broader ****Home & Garden**** hierarchy, and more specifically within Selleys' construction sealant range.

Its product page is hosted under the `/sealants/construction-silicone/` path on selleys.com.au, which places it alongside other construction-grade sealants in the Selleys lineup. The knowledge graph context available for this guide covers FlameFlex in detail but does not surface specific sibling product names from within the Selleys sealant range, so no sibling comparisons are made here beyond what is explicitly documented.

Selleys is an Australian brand with a long-standing presence in the adhesives, sealants, and fillers market, particularly in the residential and commercial construction segments. FlameFlex fits into their professional-grade offering by addressing a specialised compliance need: fire-rated and acoustically rated sealing for construction joints and penetrations. Its SMP (Silyl Modified Polymer) formulation distinguishes it from standard silicone or polyurethane sealants in the Selleys range — it combines silicone-like durability with polyurethane-like flexibility, while also being halogen-free and isocyanate-free, which matters for projects with strict material safety requirements or green building considerations.

In terms of use-case adjacencies, someone using FlameFlex on a fire-rated construction project is likely to also need a standard caulking or sealant gun sized for a 300 mL or 600 mL cartridge, depending on format, as well as nitrile rubber gloves and appropriate eye protection as noted in the product's own safety guidance. For larger concrete or masonry joints, backing rods are commonly used to control joint depth before applying any construction sealant. Where FlameFlex is applied over damp surfaces — a supported use case — surface cleaning products to remove loose debris or contaminants would be a practical complement, even though no primer is required on most substrates.

Within the fire-rated sealant category specifically, FlameFlex is differentiated by its dual fire and acoustic rating (up to 4 hours per AS1530.4, and BCA acoustic compliance), its paintability once cured, and its suitability for both indoor and outdoor environments — making it a broad-application choice rather than a single-use specialty product.