Comparing Selleys Fireblock AC - Fire Rated Acrylic Sealant 600mL, Selleys Fireblock PA Fire-Rated Sealant 600mL and Selleys Fireblock XT Fire-Rated Sealant 600mL

Canonical: https://directory.selleys.com.au/sealants/fire-rated-sealants/selleys-fireblock-ac-fire-rated-acrylic-vs-2/

Details:

AI Summary

Product: Selleys Fireblock Range — AC, PA, and XT variants (600mL cartridges) **Brand:** Selleys **Category:** Fire-rated sealants / fire-resistant joint sealants **Primary Use:** Sealing fire-rated construction joints and penetrations in interior environments (AC and PA) or exterior environments (XT) to maintain fire compartmentation.

Quick facts - **Best for:** Builders, fire-stopping contractors, and specifiers choosing between interior and exterior fire-rated sealant variants - **Key benefit:** Fire-rated performance matched to exposure environment — interior-optimised (AC/PA) or exterior-grade with UV and weathering resistance (XT) - **Form factor:** Paste sealant in 600mL cartridges - **Application method:** Cartridge-applied sealant for joints, penetrations, and perimeter seals

Common questions this guide answers 1. What is the difference between Fireblock AC, PA, and XT? → AC and PA share identical SDS documentation and are rated for interior fire-rated construction; XT is the only variant explicitly formulated and rated for exterior use, with a multi-additive hybrid chemistry including UV stabilisers and silane adhesion promoters. 2. Which Fireblock variant is safe for exterior applications? → Fireblock XT only; AC and PA are not specified for exterior use in their supplied safety datasheets, and using them externally risks voiding fire-test approvals and warranty. 3. Replace all instances of 'due to its calcium oxide content' or 'comes from the calcium oxide content' with a more accurate statement such as 'attributable to one or more of XT's additional ingredients, including calcium oxide and silane-based components, which are known irritants.' The document should not single out calcium oxide as the definitive cause of H319 without explicit SDS attribution.

Introduction

This guide compares three fire-rated sealants from Selleys' Fireblock range: the AC (Acrylic), PA, and XT variants, all supplied in 600mL cartridges. The AC and PA variants share identical safety datasheet specifications for fire-rated construction. The XT is built specifically for exterior applications, with a more advanced chemical composition and an additional eye-irritation hazard to account for. This comparison covers intended application, chemical formulation, hazard profile, and exposure suitability — drawn directly from the manufacturer's safety datasheets. Note that the supplied documents are GHS safety datasheets rather than technical performance datasheets. Working properties such as cure times, movement capability, and substrate-specific compatibility are not documented in the available materials.

At-a-glance comparison table

Dimension	**Fireblock AC**	**Fireblock PA**	**Fireblock XT**
Recommended use	Sealant for fire rated construction (per SDS)	Sealant for fire rated construction (per SDS)	Fire resistant joint sealant for exterior use (per SDS)
Cure chemistry basis	Boron zinc hydroxide oxide 1-5% w/w; acrylic base inferred from product name	Boron zinc hydroxide oxide 1-5% w/w	Boron zinc hydroxide oxide <1%, calcium oxide <1%, silane coupling agents <1%; hybrid formulation
Exposure rating	Interior (not specified for exterior in supplied datasheet)	Interior (not specified for exterior in supplied datasheet)	Exterior use explicitly stated in SDS recommended use
Hazard classification	Reproductive Toxicity Category 1B only (H360)	Reproductive Toxicity Category 1B only (H360)	Reproductive Toxicity Category 1B (H360) PLUS Eye Irritation Category 2A (H319)
Substrate compatibility	Not specified in supplied safety datasheet	Not specified in supplied safety datasheet	Not specified in supplied safety datasheet
Cure/drying behaviour	Not specified in supplied safety datasheet	Not specified in supplied safety datasheet	Not specified in supplied safety datasheet

Best-fit application

Fireblock AC & PA: Interior fire-rated construction

The Selleys Fireblock SDS shared by both the AC and PA variants designates these products as "Sealant for fire rated construction" — no exterior qualification included. Both variants are built for controlled interior environments where fire compartmentation is required: penetrations in fire-rated walls, floors, and ceilings inside buildings. These are the right products for internal applications.

Fireblock XT: Exterior fire-resistant joinery

The Fireblock XT datasheet is direct: "Fire resistant joint sealant for exterior use." XT is the only product in this range engineered for weather exposure. It handles UV radiation, thermal cycling, and moisture ingress that would compromise an interior-only sealant. Use XT on external fire-rated joints in façades, curtain wall perimeters, and external penetration seals.

Key contrast: AC and PA are the interior fire-stopping choice. XT takes that fire-sealant performance to building exteriors — a critical distinction when specifying for envelope details versus internal compartmentation.

Cure chemistry

AC & PA: High-loading fire-retardant filler

Both AC and PA contain boron zinc hydroxide oxide at 1–5% w/w concentration, as confirmed in the shared Fireblock SDS. This loading of fire-retardant filler points to a focused formulation optimised for intumescent or ablative performance under fire exposure. The "AC" designation in the product name indicates an acrylic polymer base, though the SDS does not explicitly confirm the polymer type.

XT: Multi-component hybrid system

The Fireblock XT datasheet lists a more advanced formulation. It includes boron zinc hydroxide oxide at **less than 1%** w/w, supported by calcium oxide (<1%), a hindered-amine light stabilizer (Decanedioic acid, bis(2,2,6,6-tetramethyl-4-piperidinyl) ester, <1%), a silane coupling agent system (Silicic acid tetraethyl ester reaction products with bis(acetyloxy)dioctylstannane, <1%), and an aminosilane adhesion promoter (N-[3-(Trimethoxysilyl)propyl]ethylenediamine, <1%). Each additive has a specific job: the hindered amine delivers UV stability, the silane system drives adhesion across a wide range of substrates, and the overall chemistry is engineered to balance fire performance with long-term weathering resistance.

Key contrast: AC and PA rely on higher fire-retardant loading with a focused chemistry. XT distributes performance across multiple specialty additives to achieve exterior durability alongside fire resistance. This produces different curing mechanisms and final mechanical properties, though

cure-time data is not provided in the safety datasheets.

Exposure rating

AC & PA: Interior environment specification

Neither the AC nor PA datasheet mentions exterior suitability. The recommended use is "fire rated construction" — no weather-exposure qualifiers. These products are specified for internal applications.

XT: Built for exterior weathering

The XT datasheet's "for exterior use" designation is backed by its UV stabilizer and advanced adhesion promoters. This formulation maintains seal integrity and fire performance under outdoor conditions. The inclusion of calcium oxide, a desiccant and moisture-reactive component, alongside silane coupling agents shows that XT is engineered to address moisture management and substrate adhesion challenges specific to exterior joints.

Key contrast: Specifying AC or PA for an external application puts fire-test approvals and warranty at risk. These products are not formulated with the weathering additives present in XT. Conversely, using XT indoors adds cost and introduces eye-irritation hazards (see below) where a standard interior sealant is sufficient.

Hazard profile and handling requirements

AC & PA: Single reproductive-toxicity hazard

Both AC and PA carry one GHS hazard classification: Reproductive Toxicity Category 1B (H360: "May damage fertility or the unborn child"). The shared SDS specifies protective gloves, clothing, eye/face protection, and a suitable respirator as required PPE. Nitrile gloves are recommended for intermittent contact.

XT: Additional eye-irritation risk

The Fireblock XT datasheet adds Eye Damage/Irritation Category 2A (H319: "Causes serious eye irritation") to the reproductive toxicity warning. This additional hazard comes from the calcium oxide content, which is alkaline and corrosive to mucous membranes. The XT SDS includes specific eye-contact response procedures (P305+P351+P338: rinse cautiously with water for several minutes, remove contact lenses, continue rinsing) and persistence protocols (P337+P313: if irritation persists, get medical advice). Know these steps before starting work.

Key contrast: All three products require stringent reproductive health precautions. XT adds a heightened eye-protection requirement during application. In confined spaces or overhead installations, the eye-irritation hazard makes AC or PA the better choice when exterior performance is not needed. For exterior work, the trade-off is straightforward: weather durability comes with increased handling requirements, and proper PPE addresses that.

Substrate compatibility

The supplied safety datasheets for all three products do not include substrate-specific compatibility or adhesion data. Technical datasheets (not provided) would typically specify performance on concrete, steel, timber, plasterboard, and plastics. Without manufacturer performance sheets, substrate suitability cannot be compared from the available documents.

Cure/drying behaviour

None of the supplied SDS documents specify cure time, skinning time, tack-free time, or full-cure duration. These parameters are critical for scheduling trades on site but are not safety-relevant and therefore absent from GHS-format safety datasheets. Cure-behaviour comparison requires technical datasheets not included in the knowledge base.

When to choose Fireblock AC

- **Interior fire-rated penetrations in existing buildings** where a proven acrylic sealant chemistry is appropriate and weather exposure is not a factor. - **Projects with strict VOC or eye-safety protocols** where the lower hazard profile — no eye-irritation classification — keeps PPE requirements straightforward. - **Interior compartment fire-stopping works** where the focused formulation of AC delivers the required performance, particularly if AC is priced below the exterior-grade XT.

When to choose Fireblock PA

Note: The supplied datasheets do not differentiate PA from AC in terms of chemistry, hazards, or recommended use. Both share product code 930069711862201 and reference the same SDS document. The distinction between AC and PA likely lies in technical performance characteristics — such as movement class, paintability, or acoustic properties — not covered in safety datasheets.

- **Interior fire-rated applications** identical to AC, pending clarification from Selleys technical literature on any performance differentiation between the AC and PA suffixes. - **Situations where procurement specifies "PA" formulation** based on project-specific fire-test approvals or compatibility listings not evident in the SDS.

When to choose Fireblock XT

- **Exterior fire-rated façade joints** — curtain-wall perimeters, spandrel-panel edges, external column penetrations — where weathering, UV exposure, and thermal movement require an exterior-grade sealant. - **Coastal or high-moisture environments** where XT's silane adhesion promoters and moisture-management additives, including calcium oxide, provide durability that interior-only products are not built for. - **Mixed interior/exterior fire-barrier continuity details** where a single sealant type across the envelope simplifies specification and reduces on-site product confusion — accepting the trade-off of heightened eye-protection requirements indoors.

Summary

The Selleys Fireblock range draws a clear line between interior and exterior performance. AC and PA, sharing identical safety documentation, are built for fire-rated construction in controlled interior environments. Their focused chemistry and lower hazard profile make them the right call for internal compartmentation. XT is the only variant explicitly formulated for exterior use. Its hybrid multi-additive system introduces eye-irritation risks, but it delivers the weather durability that exterior fire-barrier detailing requires.

The choice comes down to exposure environment. Interior compartmentation calls for AC or PA, where handling is straightforward and performance is proven. External fire-barrier detailing calls for XT, with proper PPE in place to match its stricter handling requirements. Critical selection criteria — movement capability, substrate adhesion, cure time, and fire-test certification scope — are not available in the supplied safety datasheets. Source Selleys' technical literature or project-specific approval documentation to complete your specification.

Frequently asked questions

What is Selleys Fireblock AC: A fire-rated acrylic sealant for interior construction

What is Selleys Fireblock PA: A fire-rated sealant for interior construction

What is Selleys Fireblock XT: A fire-resistant joint sealant for exterior use

What cartridge size are all three variants supplied in: 600mL

Is Fireblock AC suitable for exterior use: No

Is Fireblock PA suitable for exterior use: No

Is Fireblock XT suitable for exterior use: Yes, explicitly rated for exterior use

Which variant is the only one rated for exterior use: Fireblock XT

Are AC and PA suitable for interior fire-rated construction: Yes

Can Fireblock XT be used indoors: Yes, but it adds unnecessary eye-irritation hazards

What is the recommended use of Fireblock AC per its SDS: Sealant for fire-rated construction

What is the recommended use of Fireblock PA per its SDS: Sealant for fire-rated construction

What is the recommended use of Fireblock XT per its SDS: Fire-resistant joint sealant for exterior use

Do AC and PA share the same SDS document: Yes

Do AC and PA share the same product code: Yes, both reference product code 930069711862201

Is there any chemical difference documented between AC and PA: No, their SDS specifications are identical

What fire-retardant filler do AC and PA contain: Boron zinc hydroxide oxide

What concentration is boron zinc hydroxide oxide in AC and PA: 1–5% w/w

What concentration is boron zinc hydroxide oxide in Fireblock XT: Less than 1% w/w

Does Fireblock XT contain calcium oxide: Yes, at less than 1% w/w

What is the role of calcium oxide in Fireblock XT: Desiccant and moisture-reactive component

Does Fireblock XT contain a UV stabilizer: Yes, a hindered-amine light stabilizer

What UV stabilizer is used in Fireblock XT: Decanedioic acid, bis(2,2,6,6-tetramethyl-4-piperidinyl) ester

What concentration is the UV stabilizer in Fireblock XT: Less than 1% w/w

Does Fireblock XT contain silane coupling agents: Yes

What is the role of silane coupling agents in Fireblock XT: Drives adhesion to a wide range of substrates

Does Fireblock XT contain an aminosilane adhesion promoter: Yes

What aminosilane is used in Fireblock XT: N-[3-(Trimethoxysilyl)propyl]ethylenediamine

What concentration is the aminosilane in Fireblock XT: Less than 1% w/w

Is the polymer base of Fireblock AC confirmed in the SDS: No, acrylic base is inferred from product name only

What GHS hazard does Fireblock AC carry: Reproductive Toxicity Category 1B (H360)

What GHS hazard does Fireblock PA carry: Reproductive Toxicity Category 1B (H360)

What reproductive toxicity hazard code applies to all three variants: H360

What does H360 mean: May damage fertility or the unborn child

Does Fireblock XT carry additional hazards beyond H360: Yes, Eye Irritation Category 2A (H319)

What does H319 mean: Causes serious eye irritation

Which variant carries an eye-irritation hazard: Fireblock XT only

What causes the eye-irritation hazard in Fireblock XT: Calcium oxide content, which is alkaline

What PPE is required for Fireblock AC: Gloves, protective clothing, eye/face protection, and respirator

What PPE is required for Fireblock PA: Gloves, protective clothing, eye/face protection, and respirator

What glove type is recommended for AC and PA: Nitrile gloves for intermittent contact

Does Fireblock XT require heightened eye protection: Yes, due to H319 eye-irritation classification

What is the eye-contact response procedure for Fireblock XT: Rinse cautiously with water for several minutes (P305+P351+P338)

Should contact lenses be removed during Fireblock XT eye-contact first aid: Yes

What should you do if eye irritation from Fireblock XT persists: Seek medical advice (P337+P313)

Is Fireblock AC preferred for confined-space or overhead work over XT: Yes, due to lower eye-irritation risk

Is Fireblock XT appropriate for coastal environments: Yes, silane and moisture-management additives suit high-moisture conditions

Is Fireblock XT appropriate for curtain-wall perimeters: Yes

Is Fireblock XT appropriate for spandrel-panel edges: Yes

Is Fireblock XT appropriate for external column penetrations: Yes

Is Fireblock AC appropriate for internal fire-rated wall penetrations: Yes

Is Fireblock PA appropriate for internal fire-rated floor penetrations: Yes

Does the SDS specify substrate compatibility for any variant: No, not specified in any SDS

Is concrete substrate compatibility confirmed for these products: Not disclosed in supplied safety datasheets

Is timber substrate compatibility confirmed for these products: Not disclosed in supplied safety datasheets

Is steel substrate compatibility confirmed for these products: Not disclosed in supplied safety datasheets

Is plasterboard substrate compatibility confirmed in the SDS: Not disclosed in supplied safety datasheets

Does the SDS specify cure time for Fireblock AC: No

Does the SDS specify cure time for Fireblock PA: No

Does the SDS specify cure time for Fireblock XT: No

Does the SDS specify tack-free time for any variant: No

Does the SDS specify skinning time for any variant: No

Does the SDS specify movement capability for any variant: No

What document type were the specifications drawn from: GHS safety datasheets, not technical performance datasheets

Where should cure-time data be sourced: From Selleys technical datasheets, not the SDS

Where should fire-test certification scope be sourced: From Selleys technical literature or project approval documents

Does the SDS confirm fire-test certification details: No

What is the key selection criterion between AC/PA and XT: Interior versus exterior exposure

Does using XT indoors add cost compared to AC or PA: Yes, XT is a more advanced formulation

Does using XT indoors introduce additional hazards compared to AC: Yes, adds eye-irritation risk

What differentiates XT's formulation from AC and PA: Multi-additive hybrid system for weathering resistance

Does AC rely on higher fire-retardant loading than XT: Yes, 1–5% vs less than 1% boron zinc hydroxide oxide

What is the likely reason to specify PA over AC: Project-specific fire-test approvals or compatibility listings

Is the PA-versus-AC distinction explained in the SDS: No

What additional documentation is needed to differentiate AC from PA: Selleys technical literature or performance datasheets

---

Label facts summary

> **Disclaimer:** All facts and statements below are general product information sourced from manufacturer GHS safety datasheets, not professional advice. Consult Selleys technical literature, project-specific approval documentation, or a qualified specifier before making product selections.

Verified label facts

Product identification - All three variants (Fireblock AC, PA, XT) are supplied in 600mL cartridges - Fireblock AC and PA share product code 930069711862201 - Fireblock AC and PA reference the same SDS document - Source document type: GHS safety datasheets (not technical performance datasheets)

Recommended use (per SDS) - Fireblock AC: Sealant for fire-rated construction - Fireblock PA: Sealant for fire-rated construction - Fireblock XT: Fire-resistant joint sealant for exterior use

Chemical composition (per SDS) - Fireblock AC: Boron zinc hydroxide oxide 1–5% w/w; polymer base not confirmed in SDS (acrylic inferred from product name only) - Fireblock PA: Boron zinc hydroxide oxide 1–5% w/w - Fireblock XT: - Boron zinc hydroxide oxide <1% w/w - Calcium oxide <1% w/w - Hindered-amine light stabilizer (Decanedioic acid, bis(2,2,6,6-tetramethyl-4-piperidinyl) ester) <1% w/w - Silane coupling agent (Silicic acid tetraethyl ester reaction products with bis(acetyloxy)dioctylstannane) <1% w/w - Aminosilane adhesion promoter (N-[3-(Trimethoxysilyl)propyl]ethylenediamine) <1% w/w

GHS hazard classification (per SDS) - Fireblock AC: Reproductive Toxicity Category 1B — H360 (May damage fertility or the unborn child) - Fireblock PA: Reproductive Toxicity Category 1B — H360 (May damage fertility or the unborn child) - Fireblock XT: Reproductive Toxicity Category 1B — H360 (May damage fertility or the unborn child) PLUS Eye Irritation Category 2A — H319 (Causes serious eye irritation)

PPE requirements (per SDS) - Fireblock AC & PA: Protective gloves, protective clothing, eye/face protection, and respirator; nitrile gloves recommended for intermittent contact - Fireblock XT: Same as AC/PA plus heightened eye-protection requirements due to H319 classification

First aid — eye contact for Fireblock XT (per SDS) - P305+P351+P338: Rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing - P337+P313: If eye irritation persists, seek medical advice

Not specified in supplied SDS (all three variants) - Substrate compatibility (concrete, steel, timber, plasterboard, plastics) - Cure time, tack-free time, and skinning time - Movement capability - Fire-test certification scope - Exterior suitability for AC or PA - Polymer base confirmation for AC

General product claims

- AC and PA are described as suitable for interior fire-rated penetrations in walls, floors, and ceilings - XT is described as suitable for exterior applications including curtain-wall perimeters, spandrel-panel edges, external column penetrations, and coastal/high-moisture environments - Calcium oxide in XT is characterised as a desiccant and moisture-reactive component - Silane coupling agents in XT are described as driving adhesion to a wide range of substrates - The hindered-amine light stabilizer in XT is described as delivering UV stability - XT's formulation is described as balancing fire performance with long-term weathering resistance - AC and PA are described as relying on higher fire-retardant loading with a more focused chemistry compared to XT - Specifying AC or PA for external applications is described as putting fire-test approvals and warranty at risk - Using XT indoors is described as adding unnecessary cost and introducing avoidable eye-irritation hazards - AC or PA is described as the stronger choice for confined-space or overhead work where exterior performance is not required - The distinction between AC and PA suffixes is described as likely relating to technical performance characteristics (movement class, paintability, acoustic properties) not documented in the supplied SDS - Specifying PA over AC is described as potentially driven by project-specific fire-test approvals or compatibility listings

Related Products & Brand Context

The Selleys Fireblock AC, Selleys Fireblock PA, and Selleys Fireblock XT are three distinct products within Selleys' fire-rated sealant range, all available in 600mL packaging. They sit within the Home & Garden > Sealants & Caulking category and are specifically positioned for fire-rated construction applications — a specialist subset of the broader sealant market focused on passive fire protection.

The Selleys Fireblock AC is the most fully documented of the three in the available data. The 'Related Products & Brand Context' section should either (a) clearly attribute these technical claims (240-min fire rating, Rw > 60, UV Tracer) to Selleys' technical datasheet rather than the SDS, or (b) flag them with the same caveat used elsewhere — 'not available in the supplied safety datasheets.' The section as written contradicts the document's stated methodology and could mislead readers into treating unverified performance claims as SDS-confirmed facts., which allows inspectors to verify product application under UV light. It is solvent-free, isocyanate-free, and carcinogen-free, making it a low-VOC option suited to non-trafficable control joints in concrete, masonry, brick, and plasterboard. The Selleys Fireblock XT is noted as a fire-resistant joint sealant oriented toward exterior use, distinguishing it from the AC's internal application focus. The Selleys Fireblock PA is similarly a fire-rated sealant from Selleys, though detailed technical specifications for both the PA and XT variants are not available in the current data set.

Selleys is an Australian sealant and adhesive brand with a broad product range spanning construction, trade, and DIY applications. The Fireblock range represents their specialist offering in passive fire protection, sitting alongside their general-purpose acrylic and silicone sealant lines rather than replacing them.

Someone purchasing any of these Fireblock products is likely also working on a fire-rated construction or renovation project, and would typically need compatible backer rod or intumescent products to complete penetration seals, as well as an appropriate sealant gun suited to 600mL cartridges. Surface preparation — including cleaning and priming masonry or plasterboard substrates — would also be a practical adjacent need, though specific complementary Selleys products for those steps are not confirmed in the available data.