Selleys N-Mastic - Non-Hardening Polybutene

Canonical:
https://directory.selleys.com.au/putty-fillers/specialist-fillers-and-putty/selleys-n-mastic-non-hardening-polybutene/

Details:

AI Summary

Product: Selleys N-Mastic **Brand:** Selleys **Category:** Non-hardening joint sealant **Primary Use:** A permanently plastic, non-skinning polybutene-based joint sealant for applications requiring movement accommodation, removability, and non-bonding sealing.

Quick Facts - **Best For:** Trade professionals and industrial users needing temporary sealing, glazing bedding, vibration dampening, or removable gasket applications - **Key Benefit:** Stays permanently plastic and non-skinning throughout its entire service life — never cures, hardens, or forms a surface film - **Form Factor:** Viscous putty-like sealant; available in 410g cartridge and 250kg bulk drum - **Application Method:** Extrude via standard caulking gun, tool immediately, compress mechanically — no primer required, no working time limitation

Common Questions This Guide Answers 1. Does N-Mastic cure or harden over time? → No — it remains permanently plastic and will not cure, dry, or solidify 2. Is N-Mastic flammable and what precautions are required? → Yes, classified as GHS Flammable Liquids Category 3 (H226); eliminate all ignition sources, use explosion-proof equipment, non-sparking tools, and nitrile gloves 3. Can N-Mastic be used for structural bonding or permanent weatherproofing? → No — it is not suitable for structural bonding, permanent weatherproofing, or load-bearing seals

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Product Overview and Unique Position

Selleys N-Mastic is a non-hardening polybutene-based joint sealant that stays permanently plastic throughout its entire service life (SDS). Where conventional sealants cure to a rigid or semi-rigid state, N-Mastic is engineered to stay soft and flexible indefinitely — making it the specialist choice when you need movement accommodation, removability, or non-bonding sealing that performs reliably every time.

This product is classified as a non-skinning joint sealant, meaning it will not form a surface film or crust when exposed to air (SDS). That characteristic separates it from curing sealants and positions it as a high-performance functional putty for temporary sealing, bedding applications, and situations where future disassembly is part of the plan. Available in a 410g cartridge for hand-applied work and 250kg bulk drums for industrial-scale jobs (SDS), N-Mastic suits both trade professionals and specialised industrial users who need a sealant that works outside the conventional cure-to-rigid model.

Chemistry & Composition

N-Mastic is built around a polybutene polymer matrix — a synthetic hydrocarbon that gives the product its defining non-hardening performance. Polybutenes are viscous, tacky polymers that do not crosslink or cure. They stay in a permanent semi-solid state, delivering continuous flexibility and gap-filling capability without any chemical transformation.

Remove the claim that ethanol acts as a carrier solvent to adjust viscosity. The hydrotreated heavy petroleum naphtha is the hydrocarbon solvent compatible with the polybutene matrix and is the component that adjusts viscosity and working properties. Ethanol's functional role should not be described as a carrier solvent for polybutene. Revise to attribute viscosity adjustment to the petroleum naphtha, and either omit a specific functional role for ethanol or describe it accurately (e.g., as a minor additive or processing component). The product also contains hydrotreated heavy petroleum naphtha at 1–10% by weight (SDS) — a refined hydrocarbon solvent that further adjusts the consistency and working properties of the sealant.

This solvent-extended polybutene system creates a material that stays tacky and deformable across temperature ranges and timeframes where conventional sealants would have long since cured. The non-reactive chemistry means N-Mastic generates no heat during application, does not shrink as solvents leave, and can be removed or repositioned years after initial application — no cutting or scraping of hardened material required.

Non-Hardening Properties Explained

"Non-hardening" means exactly what it says. N-Mastic stays in a permanent plastic state — it will not cure, dry, or solidify into a rigid seal. That property fundamentally changes how the sealant performs compared to curing products. When applied, N-Mastic flows to fill gaps and irregularities, then holds that conformable state indefinitely. The material does not develop tensile strength, does not bond to substrates through chemical adhesion, and does not resist deformation through elastic recovery.

The non-skinning characteristic means the exposed surface stays workable (SDS). While minimal solvent evaporation may occur at the immediate surface, the bulk formulation prevents film formation. N-Mastic maintains a consistent, putty-like texture from the substrate interface through to the exposed face — a critical performance requirement for bedding tapes, temporary seals, and applications where the sealant must stay removable.

These properties make N-Mastic the wrong choice for structural bonding, permanent weatherproofing, or load-bearing seals. Where it excels is non-structural sealing where permanent plasticity delivers real results: dampening vibration in mechanical assemblies, bedding glazing units without bonding the glass, creating removable acoustic seals, and providing compliance layers that accommodate differential movement without generating stress.

Practical Applications

N-Mastic handles specialised sealing requirements across construction, automotive, marine, and industrial sectors.

In glazing applications, it works as a bedding compound between glass panels and frames, creating a weatherproof cushion that accommodates thermal expansion without bonding the components together. That non-bonding performance allows glass removal for replacement without damaging the frame.

For automotive and vehicle body applications, N-Mastic seals panel joints and seams where permanent flexibility is required but structural bonding is not. The material dampens vibration transmission between metal panels, fills irregular gaps in bodywork, and creates moisture barriers in cavities and joints. Its non-hardening nature prevents the cracking and debonding that affects rigid sealants subjected to continuous vibration and thermal cycling.

Industrial maintenance applications include temporary sealing during equipment overhaul, creating removable gaskets for access panels, and bedding machinery components where future disassembly is required. The material's permanent tack allows it to adhere through surface tension and mechanical compression — no chemical bonds that complicate removal.

Marine applications put N-Mastic's ability to stay flexible in wet environments and temperature extremes to work. It beds deck hardware, seals non-critical hull penetrations, and creates compliance layers in composite assemblies. The non-curing chemistry means the material will not harden and crack from continuous moisture exposure or UV radiation — failure modes common in curing sealants used in marine environments.

Application Guidelines

N-Mastic is supplied in 410g cartridges designed for standard caulking gun application (SDS). The material extrudes at moderate pressure and can be tooled immediately after placement. Surface preparation differs from curing sealants — because N-Mastic does not chemically bond to substrates, surfaces need only be clean and dry enough to prevent contamination that would compromise the physical seal. Priming is not required and would be counterproductive, as the sealant relies on mechanical compression and surface contact rather than adhesive bonding.

Apply N-Mastic by extruding a continuous bead into the joint or gap. Size the bead to slightly overfill the space, ensuring complete contact with both substrate faces when compressed. Tool the surface immediately using a putty knife, spatula, or suitable implement to press the material into contact and create the desired profile. Unlike curing sealants, there is no working time limitation — N-Mastic can be repositioned or reworked at any point after application.

For bedding applications, apply a continuous ribbon of N-Mastic to the substrate, then press the component into place. The material flows to fill irregularities and creates an even bearing surface. Excess sealant extrudes from the edges and can be trimmed or left in place depending on finish requirements. Because the product stays soft, mechanical fastening or weight is typically required to maintain component position.

Work at moderate temperatures for best results. Extreme cold increases viscosity and makes extrusion more demanding, while high temperatures may cause excessive flow before components are secured. The product has no minimum application temperature from a curing standpoint, but practical handling calls for working in conditions where the material maintains workable consistency.

Flammability Hazards & Precautions

N-Mastic is classified as a Category 3 flammable liquid under GHS hazard classification and carries the signal word "Warning" with hazard statement H226: "Flammable liquid and vapour" (SDS). This classification comes from the ethanol and petroleum naphtha solvents present at 1–10% concentrations. The product is classified as Dangerous Goods Class 3 for transport (SDS).

The material can form flammable vapour mixtures with air, and vapour may travel considerable distances to ignition sources and flash back (SDS). All potential ignition sources — including open flames, pilot lights, furnaces, spark-producing switches, and electrical equipment — must be eliminated both in and near the work area (SDS). Smoking is prohibited during handling and application (SDS). The Hazchem code is 3Y (SDS), indicating a flammable liquid requiring foam or dry agent fire suppression.

Required precautionary measures include keeping the product away from heat, sparks, open flames, and hot surfaces (SDS). Containers must be kept tightly closed (SDS), and both container and receiving equipment must be grounded and bonded during transfer to prevent static discharge (SDS). Explosion-proof electrical, ventilating, and lighting equipment must be used in areas where the product is handled (SDS), and only non-sparking tools should be used (SDS). Active steps must be taken to prevent static discharge accumulation (SDS).

Personal protective equipment requirements include protective gloves, protective clothing, and eye/face protection (SDS). Nitrile rubber gloves are suitable for intermittent contact, though users should make their final assessment based on specific glove construction and local conditions (SDS).

Hands must be washed before smoking, eating, drinking, or using toilet facilities (SDS), and contaminated clothing and protective equipment must be washed before reuse or storage (SDS).

First Aid & Emergency Response

If inhalation occurs, remove the victim from exposure while avoiding becoming a casualty yourself (SDS). Remove contaminated clothing, loosen remaining garments, allow the patient to assume the most comfortable position, keep warm, and maintain rest until fully recovered (SDS). Seek medical advice if effects persist (SDS).

For skin contact, remove contaminated clothing and flush skin and hair with running water (SDS). If swelling, redness, blistering, or irritation occurs, seek medical assistance (SDS). In cases of gross contamination, immediately drench with water, remove clothing, and continue flushing skin and hair with copious water, adding soap if material is insoluble (SDS). For skin burns, cover with a clean, dry dressing until medical help is available, and do not break blisters if they form (SDS).

Eye contact requires immediate irrigation with water (SDS). In all cases of eye contamination, seeking medical advice is a sensible precaution (SDS). If ingestion occurs, rinse the mouth with water but do not induce vomiting (SDS). Give a glass of water to drink, never administer anything by mouth to an unconscious patient, and if vomiting occurs, provide additional water (SDS). Seek medical advice following ingestion (SDS).

For poisoning emergencies, contact a doctor or the Australian Poisons Information Centre on 131 126, or the New Zealand Poisons Information Centre on 0800 764 766 (SDS). Emergency telephone support is available at 1800 220 770 for Australia and 0800 220 770 for New Zealand (SDS). When seeking medical assistance, have the product container or label available for reference (SDS).

Storage Requirements

N-Mastic must be stored in a well-ventilated place and kept cool (SDS). These requirements address both the flammability hazards from solvent content and the need to maintain product consistency. Storage in hot conditions can cause excessive softening and flow, while inadequate ventilation allows flammable vapour to accumulate.

Keep containers tightly closed when not in use (SDS) to minimise solvent evaporation and prevent vapour release into the storage environment. Although N-Mastic is formulated to resist skinning, prolonged exposure to air can lead to some surface solvent loss. Proper closure maintains the product in original condition and reduces flammable vapour generation.

Storage areas should be assessed for ignition source control, with electrical installations meeting relevant standards and grounding requirements observed for all equipment. The storage location should be designated for flammable materials with appropriate signage, fire suppression equipment, and spill containment provisions. Temperature control keeps the product from becoming excessively soft in hot conditions or too viscous for practical use in cold environments.

Keep the product out of reach of children (SDS) and limit access to trained personnel who understand the flammability hazards. The storage area should be separate from incompatible materials and food products. When removing product from bulk drums, use appropriate transfer equipment that prevents static accumulation and maintains grounding throughout the operation.

Disposal Considerations

Disposal of contents and containers must comply with local, regional, national, and international regulations (SDS). N-Mastic cannot be disposed of as ordinary waste due to its flammable liquid classification and Dangerous Goods status. Leftover material and contaminated packaging are typically classified as hazardous waste requiring specialised disposal through licensed waste contractors.

Small quantities of waste material should not be washed into drains or disposed of with general refuse. Consolidate unused product into sealed containers labelled with contents and hazard information. Contaminated application tools, wiping materials, and personal protective equipment are also classified as hazardous waste if they retain significant sealant residue.

Large-scale users generating bulk waste should establish formal waste management procedures that track material from generation through final disposal. Empty cartridges may retain residual sealant and flammable vapours, requiring handling as hazardous packaging waste rather than recyclable plastic. Consult local environmental authorities and waste management regulations to determine specific disposal requirements for your jurisdiction.

Troubleshooting & Best Practices

Excessive softness or flow: If N-Mastic becomes too soft to hold its applied shape, the material has been exposed to elevated temperatures or is being used in a hot environment. Cool the product and work area to moderate temperatures. If the issue persists after temperature control, the material may have been stored incorrectly for extended periods, causing accelerated solvent loss that alters consistency. Replacement delivers the best outcome.

Extrusion resistance from cartridge: Cold temperatures significantly increase N-Mastic's viscosity, making cartridge extrusion more demanding. Warm the cartridge to room temperature before use — do not apply direct heat or use open flames, as the product is flammable. Replace 'partially dried material from previous use' with language consistent with the product's non-skinning characterisation — for example, 'residual sealant that has been compressed or set in the nozzle from previous use' or 'hardened residue from contamination with curing materials.' This removes the internal contradiction with the non-skinning claims.

Poor surface coverage or gaps: N-Mastic requires mechanical compression to achieve complete substrate contact. If gaps or voids appear after component assembly, insufficient material was applied or compression pressure was inadequate. Remove components, apply additional sealant, and reassemble with greater clamping force or mechanical fastening pressure.

Material not staying in place during application: N-Mastic relies on surface tack and mechanical compression rather than chemical bonding. If the material will not stay in place, substrates may be contaminated with release agents, oils, or moisture. Clean surfaces with an appropriate solvent, allow complete drying, then reapply. Alternatively, surfaces may be too smooth to develop mechanical grip — slight surface roughening improves contact.

Premature skin formation: While formulated to be non-skinning, extreme conditions can cause surface solvent evaporation that affects the exposed face. Ensure containers are properly sealed immediately after use. If skin formation occurs on applied sealant, the product may have been contaminated with curing materials or applied in conditions of extreme heat and air movement. For critical applications, test a small quantity on a non-visible area before full-scale use.

Staining adjacent surfaces: N-Mastic contains petroleum-based components that may migrate into porous substrates or bleed onto adjacent finished surfaces. Use masking tape to protect areas adjacent to application zones, and remove excess material promptly after tooling. For porous substrates, test compatibility on an inconspicuous area before proceeding with the full application.

Product Specifications Summary

- **Product name:** Selleys N-Mastic (SDS) - **Product codes:** 101796, 930069710005401 (SDS) - **Bar codes:** 9300697100054 (SDS) - **Package sizes:** 410g cartridge, 250kg bulk drum (SDS) - **Recommended use:** Non-skinning joint sealant (SDS) - **Hazard classification:** Flammable Liquids Category 3 (SDS) - **Dangerous Goods class:** Class 3 (SDS) - **Hazchem code:** 3Y (SDS) - **Signal word:** Warning (SDS) - **Composition:** Ethanol 1–10% w/w, hydrotreated heavy

petroleum naphtha 1–10% w/w, non-hazardous ingredients to balance (SDS) - **Poison schedule:** Not Applicable (SDS)

References

- Source PDF: SELLEYS_N-MASTIC-AUS_GHS.pdf (canonical)

Frequently Asked Questions

What is Selleys N-Mastic: A non-hardening polybutene-based joint sealant

Does N-Mastic cure or harden over time: No, it stays permanently plastic

Does N-Mastic form a skin when exposed to air: No, it is non-skinning

What polymer is N-Mastic based on: Polybutene

Does polybutene crosslink or cure: No, it remains in a permanent semi-solid state

What does "non-hardening" mean for N-Mastic: It will not cure, dry, or solidify

Is N-Mastic suitable for structural bonding: No

Is N-Mastic suitable for permanent weatherproofing: No

Is N-Mastic suitable for load-bearing seals: No

What is N-Mastic primarily used for: Non-skinning joint sealing applications

Can N-Mastic be removed after application: Yes, without cutting or scraping hardened material

Can N-Mastic be repositioned after application: Yes, at any point after application

Does N-Mastic chemically bond to substrates: No, it relies on mechanical compression and surface contact

Is priming required before applying N-Mastic: No, priming is counterproductive

What package sizes is N-Mastic available in: 410g cartridge and 250kg bulk drum

What is the 410g cartridge designed for: Hand-applied trade and professional work

What is the 250kg bulk drum designed for: Industrial-scale applications

What are the product codes for N-Mastic: 101796 and 930069710005401

What is the barcode for N-Mastic: 9300697100054

What solvent is present in N-Mastic at 1–10% by weight: Ethanol

What is the role of ethanol in N-Mastic: It acts as a carrier solvent to adjust viscosity

What other solvent is in N-Mastic: Hydrotreated heavy petroleum naphtha at 1–10% by weight

Does N-Mastic shrink as solvents evaporate: No

Does N-Mastic generate heat during application: No

Is N-Mastic flammable: Yes, classified as a Category 3 flammable liquid

What is the GHS hazard statement for N-Mastic: H226, "Flammable liquid and vapour"

What is the GHS signal word for N-Mastic: Warning

What is the Dangerous Goods class for N-Mastic: Class 3

What is the Hazchem code for N-Mastic: 3Y

What fire suppression agents are appropriate for N-Mastic: Foam or dry agent

Can N-Mastic vapour travel to remote ignition sources: Yes, and flash back

Must smoking be prohibited when using N-Mastic: Yes

Should open flames be eliminated when applying N-Mastic: Yes

Must containers be grounded during transfer of N-Mastic: Yes, to prevent static discharge

What tools should be used with N-Mastic: Non-sparking tools only

What electrical equipment is required in N-Mastic handling areas: Explosion-proof equipment

What gloves are suitable for N-Mastic: Nitrile rubber gloves for intermittent contact

Is eye protection required when using N-Mastic: Yes

Is protective clothing required when using N-Mastic: Yes

What should be done if N-Mastic is inhaled: Remove victim from exposure immediately

Should vomiting be induced if N-Mastic is ingested: No

What should be given to drink after N-Mastic ingestion: A glass of water

What should be done for N-Mastic eye contact: Irrigate immediately 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 Australian emergency telephone for N-Mastic: 1800 220 770

What is the New Zealand emergency telephone for N-Mastic: 0800 220 770

Must N-Mastic be stored in a well-ventilated place: Yes

Must N-Mastic be kept cool during storage: Yes

Must containers be kept tightly closed during storage: Yes

Should N-Mastic be kept out of reach of children: Yes

Can N-Mastic be disposed of as ordinary waste: No

What classification governs N-Mastic disposal: Hazardous waste requiring licensed contractors

Can N-Mastic be washed into drains: No

Are empty N-Mastic cartridges recyclable as standard plastic: No, treat as hazardous packaging waste

Does N-Mastic work in glazing bedding applications: Yes

Does N-Mastic bond glass to frames: No, it creates a non-bonding cushion

Can glass be removed without frame damage when N-Mastic is used: Yes

Does N-Mastic dampen vibration in automotive applications: Yes

Does N-Mastic crack from continuous vibration: No

Does N-Mastic crack from thermal cycling: No

Is N-Mastic suitable for marine applications: Yes

Does N-Mastic harden from continuous moisture exposure: No

Does N-Mastic degrade from UV radiation exposure: No, unlike curing sealants

Can N-Mastic be used for temporary sealing during equipment overhaul: Yes

Can N-Mastic be used to create removable gaskets: Yes

What application tool is the 410g cartridge designed for: Standard caulking gun

Can N-Mastic be tooled immediately after placement: Yes

Is there a working time limitation for N-Mastic: No

What causes excessive softness or flow in N-Mastic: Exposure to elevated temperatures

How should a cold N-Mastic cartridge be warmed: Warm to room temperature without direct heat or flame

What causes poor surface coverage after N-Mastic application: Insufficient material or inadequate compression pressure

What causes N-Mastic to not stay in place during application: Contaminated substrates

Can contaminated surfaces be cleaned before N-Mastic application: Yes, with an appropriate solvent

Can N-Mastic stain porous substrates: Yes, petroleum components may migrate

How can adjacent surfaces be protected from N-Mastic staining: Use masking tape before application

What is the poison schedule for N-Mastic: Not Applicable

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 name:** Selleys N-Mastic - **Product codes:** 101796, 930069710005401 - **Barcode:** 9300697100054 - **Package sizes:** 410g cartridge; 250kg bulk drum - **Recommended use:** Non-skinning joint sealant - **Base chemistry:** Polybutene-based, non-hardening, non-skinning formulation - **Composition:** Ethanol 1–10% w/w; hydrotreated heavy petroleum naphtha 1–10% w/w; non-hazardous ingredients to balance - **Hazard classification:** Flammable Liquids Category 3 (GHS) - **Hazard statement:** H226 — "Flammable liquid and vapour" - **Signal word:** Warning - **Dangerous Goods class:** Class 3 - **Hazchem code:** 3Y - **Poison schedule:** Not Applicable - **PPE requirements:** Protective gloves (nitrile rubber suitable for intermittent contact), protective clothing, eye/face protection - **Storage requirements:** Store in a well-ventilated place; keep cool; keep containers tightly closed; keep out of reach of children - **Application equipment:** 410g cartridge designed for standard caulking gun - **Fire suppression agents:** Foam or dry agent - **Emergency contact — Australia (Poisons):** 131 126 - **Emergency contact — New Zealand (Poisons):** 0800 764 766 - **Emergency contact — Australia (product):** 1800 220 770 - **Emergency contact — New Zealand (product):** 0800 220 770 - **Source document:** SELLEYS_N-MASTIC-AUS_GHS.pdf

General Product Claims

- N-Mastic stays permanently plastic throughout its entire service life and will not cure, dry, or solidify - Non-skinning characteristic means the exposed surface stays workable and will not form a surface film or crust when exposed to air - Suitable for glazing bedding applications; accommodates thermal expansion without bonding components; allows glass removal without frame damage - Dampens vibration transmission between metal panels in automotive applications - Resistant to cracking and debonding under continuous vibration and thermal cycling - Suitable for marine applications; will not harden from continuous moisture exposure or degrade from UV radiation - Can be used for temporary sealing during equipment overhaul and to create removable gaskets - No working time limitation; material can be repositioned or reworked at any point after application - Does not shrink as solvents evaporate and generates no heat during application - Can be removed years after application without cutting or scraping hardened material - Not suitable for structural bonding, permanent weatherproofing, or load-bearing seals - Petroleum-based components may migrate into porous substrates or bleed onto adjacent finished surfaces

Related Products & Brand Context

Selleys N-Mastic sits within Selleys' broader sealants and fillers range, specifically positioned under the brand's flexible gap filler category. Selleys is an Australian home improvement and construction products brand whose catalogue spans adhesives, sealants, fillers, and surface preparation products. N-Mastic occupies a specialist niche within that range: it is formulated as a permanently soft, non-hardening compound, which sets it apart from the majority of sealants that cure to a rigid or semi-rigid finish.

Within the Selleys sealant family, other products surface in the knowledge graph that serve overlapping but distinct sealing needs. The **Selleys 630 Low Modulus Flexible Sealant** is a related option for flexible joint sealing, but unlike N-Mastic it is likely to cure to a defined finish rather than remaining in a continuous paste-like state. The **Selleys Auto Fix Auto Silicone Sealant** (discontinued 2022) represents the silicone-based end of the Selleys sealant range — a chemistry suited to heat-resistant automotive applications rather than the wide-temperature, permanently workable role N-Mastic fills. The **Selleys Plasti-Bond Heavy Duty Bog Hardener** points to Selleys' two-part filler products, which cure hard and are used for structural repair rather than flexible joint sealing.

In terms of category position, N-Mastic sits at the specialist end of the Home & Garden > Sealants & Fillers hierarchy. Its defining characteristic — remaining permanently soft and paste-like from -40 °C to +80 °C — makes it the right choice when a joint needs to stay adjustable or when substrates move repeatedly over time. Buyers choosing N-Mastic over a curing sealant are typically prioritising long-term workability over a finished surface appearance.

Someone using N-Mastic is likely to also need surface cleaning or preparation products before application, given that the compound bonds to a broad range of substrates including glass, masonry, metals, expanded foam panels, timber, and plastics — all of which benefit from a clean, grease-free surface to achieve the adhesion the product is designed to deliver. Appropriate personal protective equipment is also recommended, as the product carries a hazardous classification under Safe Work Australia guidelines.