

The Complete Guide to Automotive Care & Cleaning: Protecting Every Surface of Your Car with Selleys

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Executive Summary

Your car is not simply a machine that gets dirty. It is a collection of chemically distinct surfaces — polyurethane clear coat, polycarbonate headlight lenses, EPDM rubber seals, PVC vinyl trim, woven upholstery, and interior glass — each undergoing its own active degradation process at this very moment. UV photons are breaking molecular bonds in your clear coat. Acidic insect enzymes are etching into your paint. Atmospheric ozone is cracking your door seals. Plasticisers are migrating out of your dashboard vinyl. And in your sealed cabin, volatile organic compounds are condensing onto your windscreen interior and settling into your upholstery fibres.

The consequence of ignoring these processes is not merely a dull or dirty-looking car. It is structural material failure: peeling clear coat, cracked rubber seals allowing water ingress, headlights so oxidised they deliver only 20% of their original light output, and an interior environment that actively accumulates health-relevant contaminants. Protective coatings play a vital role in extending the durability of automotive surfaces by mitigating environmental degradation and mechanical wear — automotive coatings are designed to resist UV radiation, acid rain, oxidation, and mechanical damage such as scratches, swirl marks, or chipping, and beyond aesthetic enhancement, coatings serve as a barrier providing long-term protection against environmental hazards.

This pillar page synthesises the complete Selleys automotive care system into a single, authoritative framework. It maps every threat to every surface, explains the chemistry behind each degradation mechanism, and provides a structured, evidence-based protocol for protecting your entire vehicle — from the clear coat to the cabin air.

How Your Car's Surfaces Are Actually Structured — and Why That Determines Everything

Before you can protect a surface, you must understand what it is. Modern vehicles are not one material — they are a system of at least six chemically distinct substrate types, each with unique vulnerabilities and each requiring a tailored approach.

****The paint system**** is a four-layer stack: e-coat primer, base coat (pigment), and clear coat — a transparent polymer layer, typically polyurethane or acrylic-urethane, that provides gloss and shields the colour beneath. UV light absorber additives play a critical role in determining the long-term weathering performance of modern, multi-layer, automotive paint systems. A typical automotive paint system consists of four layers: clearcoat, basecoat, primer, and e-coat. The top, clearcoat layer is expected to protect underlying layers and maintain a shiny appearance throughout the life of the

vehicle. Critically, ideally the clearcoat layer would be intrinsically resistant to photodegradation — however, in reality, most clearcoat paints rely on additives to minimise the effects of UV light exposure and to screen UV light from reaching underlying layers. Prior art attempts to improve UV resistance have included the addition of organic UV absorbers and hindered amine light stabilisers — but these organic additives are themselves susceptible to photodegradation, limiting their effectiveness with time.

****Headlight lenses**** are polycarbonate — lighter and more impact-resistant than glass, but highly vulnerable to UV degradation once their factory hardcoat fails. ****Rubber seals**** are typically EPDM (ethylene propylene diene monomer), which is susceptible to ozone attack and oxidative chain scission. ****Exterior plastic trim**** is generally polypropylene or ABS, vulnerable to UV photo-oxidation and surface chalking. ****Interior vinyl and dashboard surfaces**** are PVC-based, dependent on plasticisers for flexibility — plasticisers that migrate, evaporate, and deplete over time. And ****interior glass**** is a deceptively complex surface that accumulates a composite film from VOC off-gassing, body oils, and combustion residues.

Understanding this substrate map is the foundation of everything that follows. Every section of this guide addresses a specific surface type with a specific threat profile. Conflating them — using paint wax on rubber seals, or glass cleaner on dashboard trim — is one of the most reliable ways to accelerate the very damage you are trying to prevent.

The Unified Threat Model: Six Degradation Forces Attacking Your Car Simultaneously

The most important insight this guide provides — one that no individual cluster article can deliver in isolation — is this: ****the threats to your vehicle do not operate independently****. UV radiation accelerates bug acid etching. Heat bakes tar into a permanent bond. Ozone and UV attack rubber seals simultaneously. VOC off-gassing from your dashboard deposits film on your windscreen interior. Each threat amplifies the others, and the correct protection strategy must address all of them in a coordinated sequence.

Threat 1: UV Radiation — The Master Accelerant

UV radiation is simultaneously the most destructive individual force acting on your vehicle and the primary accelerant of every other degradation mechanism. Its destruction is cumulative, molecular, and invisible until significant damage has already occurred.

UV light that passes through the clearcoat to the basecoat layer creates the potential for clearcoat peeling if the basecoat/clearcoat interface is oxidised. UV light that reaches deep into the clearcoat layer can also degrade the clearcoat, resulting in poor appearance or cracking.

Car paint fade is primarily driven by the sun's UV rays, which degrade the molecular bonds in automotive paint pigments. This breakdown results in oxidation, where the surface loses its smooth, reflective qualities and becomes chalky. Darker paints, such as black, navy, and deep red, tend to fade faster because they absorb more heat, accelerating the deterioration.

UV's role as an accelerant is particularly significant. Research on automotive coating degradation has confirmed that the post-aging process, which simultaneously exposes contaminants and UV radiation to coatings, degrades the clear coat much more intensively than either factor alone — confirming that UV radiation acts as a catalyst for other contaminants already present on the surface. This is why a bug splat left on a car in direct summer sun causes more damage in two hours than the same splat left in shade for twelve.

The same mechanism applies to headlight lenses. New research from AAA reveals that clouded or yellowed headlights generate only 20 percent of the amount of light that new headlights do, leading to dangerous nighttime driving conditions. This decrease is caused by sunlight damage to protective plastic coatings, resulting in discoloration that considerably diminishes the headlight's ability to provide

adequate light on dark roadways.

For a complete treatment of UV's role across all painted surfaces, see our guide on [*Why Regular Car Cleaning Is About Protection, Not Just Appearance: The Science Behind Automotive Surface Damage*](#). For the specific chemistry of polycarbonate headlight degradation, see [*DIY Headlight Restoration vs. Professional Resurfacing*](#).

Threat 2: Insect Splatter — The Acidic Time Bomb

Bug splatter is among the most chemically aggressive contaminants your car encounters, and among the most underestimated. The body fluids of insects contain a complex mix of proteins and enzymes that become increasingly corrosive as they dry — particularly under heat and UV exposure.

The pH chemistry is well-documented and alarming. Fresh lovebug residue tests near pH 6.5 — close to neutral — but bacterial decomposition drops it to an acidic 4.25 within approximately 24 hours, a pH level comparable to vinegar. Research cited by the University of Florida's Institute of Food and Agricultural Sciences confirmed this pH shift and its direct correlation with the onset of clear coat etching. UV from the sun can catalyse the etching process with certain types of insects, compressing the damage timeline dramatically in summer conditions.

The damage mechanism is two-pronged: chemical etching from the acidic residue, and physical abrasion from the hardened exoskeleton if the splatter is allowed to dry completely and is then scrubbed without chemical pre-treatment. Once etching has occurred, the damage is no longer on the surface — it is in the paint, and no amount of washing will reverse it.

****The critical window is 24 hours.**** In the first two hours after impact, the splatter is still wet and largely water-soluble. After that window closes, a dedicated chemical remover is required. For the complete step-by-step removal process, including dwell time guidance and tool selection, see our guide on [*How to Remove Bugs and Tar from Your Car Without Damaging the Paint*](#).

Threat 3: Road Tar — The Hydrocarbon Bond

Road tar operates through a completely different chemical mechanism from bug acids, but the outcome is equally destructive if left unaddressed. Tar is primarily composed of bitumen — a sticky, non-polar hydrocarbon that is hydrophobic by nature. This is why standard car shampoo, which uses water-based surfactants, cannot dissolve it. Only a dedicated solvent-based remover can penetrate the bitumen and break its bond with the clear coat.

The damage progression is time-dependent and heat-accelerated. What begins as a soft, viscous deposit cools and hardens into a rock-solid adhesion point. As Turtle Wax's senior vice president of research noted, tar becomes stickier in warmer weather because natural solvents within it can migrate into the vehicle's paint and cause permanent staining. Tar also traps moisture and road contaminants against the paint surface, creating conditions for localised corrosion — making it a structural risk, not merely an aesthetic one.

For the solvent chemistry, correct dwell time, and surface-specific considerations for tar removal (including why you should never apply solvent-based removers to hot wheels), see our guide on [*How to Remove Bugs and Tar from Your Car Without Damaging the Paint*](#).

Threat 4: Ozone and Atmospheric Oxidation — The Rubber and Vinyl Problem

While paint and headlights face acid and UV threats, your car's rubber seals, door weatherstripping, and vinyl trim face a distinct and often overlooked threat: atmospheric ozone and oxidative degradation.

Research on EPDM rubber automotive seals has found that even at concentrations as low as 50 parts per billion, ozone attacks the unsaturated bonds in EPDM, creating surface cracks that propagate under mechanical stress. This degradation mode is exacerbated in urban environments and regions with high photochemical smog levels, where ozone concentrations frequently exceed 100 ppb —

conditions present across most major Australian cities.

The practical consequence of ignoring this: dry, cracked door seals allow water ingress, wind noise, and in severe cases, structural corrosion in the door cavity. Cracked tyre sidewalls present a safety concern. And vinyl that has lost its plasticisers becomes brittle, cracks, and cannot be restored — only replaced.

The correct intervention is regular conditioning with a product specifically formulated for rubber and vinyl substrates — not paint wax, not silicone-based dressings, and absolutely not petroleum-based products on tyre sidewalls, which break down the anti-degradant compounds that tyre manufacturers build into the rubber compound. For the complete conditioning process, see our guide on **How to Restore and Protect Faded Vinyl, Rubber Seals, and Plastic Trim**.

Threat 5: Interior VOC Off-Gassing — The Hidden Contamination Source

The car cabin is the most chemically complex environment on the vehicle. Air pollution in automotive cabins primarily results from volatile organic compounds (VOCs) and carbonyl compounds emitted from interior materials of newly manufactured automobiles, pollutants generated by user activities, and infiltration of surrounding air pollutants due to traffic conditions. The unique smell in new cars is attributed to VOCs, which can adversely affect the respiratory system, nervous system, and skin. Various interior materials including sheets, artificial leather, and internal covers in automotive cabins and their associated pollutants are the main causes of new car syndrome.

The VOCs commonly off-gassed in vehicle interiors that have the greatest potential toxicity to humans include benzene and formaldehyde (classified by the IARC as Group 1 carcinogens), ethyl benzene and styrene (Group 2B carcinogens), and other molecules such as toluene, xylene, and acetaldehyde. Within the passenger compartment of a new vehicle, the concentration of each of these compounds often exceeds the levels deemed safe for extended human exposure.

Research shows that material surface temperature crucially influences in-cabin VOC emission characteristics rather than air temperature alone — this particularly affects new vehicles on summer hot days, explaining the strong new car smell.

These VOCs don't just affect air quality. They condense on the interior windscreen surface, forming the oily, hazy film that returns days after cleaning — a chemistry problem, not a cleaning failure. Addressing it requires a purpose-formulated automotive glass cleaner with anti-fogging chemistry, applied with the correct technique and in the correct sequence. For the complete interior cleaning protocol, see our guide on **The Complete Car Interior Cleaning Checklist**.

The Selleys Automotive Care System: A Surface-by-Surface Protection Framework

Understanding the threats is half the equation. The other half is knowing precisely which product addresses which threat, on which surface, in which sequence. The following framework maps the complete Selleys Polyglaze system to each surface type and degradation mechanism.

Layer 1: Contamination Removal — Before Protection Can Begin

No protective product performs correctly on a contaminated surface. Wax applied over bug acids seals the corrosive chemistry beneath it. Conditioner applied over tar-contaminated rubber cannot penetrate to the substrate. Surface preparation is not an optional preliminary step — it is the foundational layer on which all protection depends.

****Selleys Polyglaze Bug & Tar Remover**** is the dedicated solvent-based product for this stage. Its chemistry is designed to dissolve bitumen and break down organic contaminants — insect proteins, tree sap, road tar — through chemical action rather than mechanical force. The critical technique principle is dwell time, not scrubbing pressure. Applying the product, allowing it to chemically dissolve

the contaminant (30 seconds for fresh bug splatter; up to 5 minutes for hardened tar), and then wiping with a single pass of a clean, edgeless microfibre cloth is the correct process. Scrubbing hardened contaminants without chemical pre-treatment is the single most common cause of DIY-inflicted swirl marks and clear coat damage.

****Tool selection at this stage is non-negotiable.**** Standard sponges trap grit in their flat, porous surface and drag it across the paint. Quality microfibre cloths, by contrast, use split fibres engineered to lift and trap particles inside the fibre structure rather than dragging them across the surface. For bug and tar removal specifically, use a dedicated cloth rated at 300 GSM or above, and never reuse a cloth that has contacted tar on lower panels for upper painted surfaces.

Layer 2: The Wash — Chemistry That Protects as It Cleans

Once contamination is removed, the wash step determines the baseline protection level of the surface going forward. Wax coatings remain widely adopted due to their affordability and ease of use, and the choice between a wash-only product and a combined wash-and-wax product is a meaningful strategic decision, not merely a preference.

****Selleys Polyglaze Sparkling Wash**** is engineered for automotive surfaces with a critical differentiator from household detergents: it contains anti-rust agents that form a protective barrier in enclosed cavities — door sills, under-trim channels, and boot floor channels — where moisture collects and ordinary detergents can promote corrosion. It is the correct choice when an existing wax or sealant layer is already in place, or when preparing the surface for a dedicated polishing step.

****Selleys Polyglaze Wash & Wax**** adds a protective wax deposit with every wash — a continuously renewed sacrificial layer between environmental threats and the clear coat. This is the correct choice for daily drivers that park outdoors, vehicles that haven't been waxed recently, and any car in a high-UV climate. Protective coatings play a vital role in extending the durability of automotive surfaces by mitigating environmental degradation and mechanical wear, and automotive coatings are designed to resist UV radiation, acid rain, oxidation, and mechanical damage.

****The drying step is where most wash-induced damage occurs.**** Research confirms that drying causes more paint damage than washing — a counterintuitive finding that underscores why tool selection at this stage is as important as during washing. A flat chamois drags any remaining microscopic grit particles across the clear coat in long, circular arcs — creating the swirl marks that are the hallmark of poor technique. A high-GSM (500+) microfibre drying towel, used in a blotting rather than dragging motion, lifts residual particles into the fibre structure and away from the paint surface.

****Environmental responsibility is also a legal obligation in Australia.**** Research has found that over 13 gigalitres of contaminated wastewater are directed into stormwater systems across Australia each year from uncontrolled vehicle washing. The South Australian EPA is explicit: all wash water must be diverted to garden or soakage areas, not to stormwater. Washing on grass or a permeable surface, and using the correct dilution ratios (30mL per bucket for Polyglaze Sparkling Wash), reduces both environmental impact and total surfactant load in run-off.

For the complete product selection framework, dilution ratios, and wash sequence, see our guide on [*Car Wash vs. Wash & Wax: Which Selleys Polyglaze Formula Is Right for Your Car*](#).

Layer 3: Polishing and Paint Correction

****Selleys Polyglaze Liquid Polish**** occupies the correction and maintenance layer of the protection hierarchy. It addresses the micro-oxidation, light scratches, and surface dulling that accumulate between washes — and it is the first-line intervention for Stage 1 headlight lens haze.

The polish step is also where the protection hierarchy resets. After polishing, the surface is clean, corrected, and product-free — the ideal substrate for either a dedicated wax application or a transition to Wash & Wax as the ongoing maintenance product.

Layer 4: Rubber, Vinyl, and Plastic Trim Protection

****Selleys Polyglaze Interior Protectant**** addresses the surfaces that paint products cannot — and must not — touch. It cleans, conditions, and protects vinyl, leather, rubber, and plastic surfaces without leaving an oily residue that attracts dust and acts as a mild abrasive on the next cleaning cycle.

The application method matters as much as the product. Always spray onto the applicator cloth, never directly onto the surface — this prevents overspray onto glass surfaces (which creates the most persistent interior windscreen film) and gives precise control near rubber seals and instrument clusters. The steering wheel rim and pedal area must never be treated with protectant — these are grip-critical surfaces.

For tyre sidewalls, the product selection criterion is specific: use only a water-based treatment that will not harm the anti-degradant compounds built into the rubber compound. Petroleum-based dressings break down these anti-degradants, accelerating the very UV and ozone degradation they appear to address cosmetically.

For the complete diagnosis framework (Stage 1 through Stage 3 deterioration), conditioning sequence, and reapplication frequency by climate, see our guide on [*How to Restore and Protect Faded Vinyl, Rubber Seals, and Plastic Trim*](#).

Layer 5: Headlight Restoration — The Safety-Critical Surface

New research from AAA reveals that clouded or yellowed headlights generate only 20 percent of the amount of light that new headlights do, leading to dangerous nighttime driving conditions. With 50 percent of crashes occurring at night, AAA urges drivers to check their headlights for signs of deterioration.

AAA examined the impact of deterioration on the amount of light produced using an accredited laboratory to test headlights from two popular sedans, approximately 11 years in age. Results from the degraded headlights were measured against new headlights to quantify the amount of light produced for each. Restoration research revealed that deteriorated headlights, when used on low beam, provided just 22 percent of the amount of light a new headlight does when operating at full capacity.

The headlight lens degradation pathway follows a four-stage progression. At Stage 1 (light surface haze, factory hardcoat largely intact), ****Selleys Polyglaze Liquid Polish**** can restore surface clarity and optical brightness. At Stage 2 (moderate oxidation, visible yellowing), a plastic-specific polishing compound is required. At Stage 3 (heavy oxidation with surface crazing), multi-stage wet sanding — progressing from 600 grit through to 3000 grit — is required before any polishing step. At Stage 4 (through-thickness yellowing visible from inside the lens), no surface restoration will achieve lasting results, and lens replacement is the only viable path.

The step that separates a restoration lasting six months from one lasting two years is UV sealant application immediately after polishing. The sanding process removes the original factory hardcoat; without a new UV-protective layer, the raw polycarbonate will re-oxidise within months. This is not optional — it is the difference between a repair and a temporary fix.

For the complete four-stage assessment framework, wet sanding technique, and the professional vs. DIY decision matrix, see our guide on [*DIY Headlight Restoration vs. Professional Resurfacing*](#).

Layer 6: Interior Cleaning — The System That Protects Occupant Health

****Selleys Polyglaze Invisible Glass**** addresses the interior windscreen — the most technically demanding surface in the car. Because car interiors are so tightly enclosed, VOC concentrations can build up quickly, especially when the vehicle is new and materials are still off-gassing. Unlike larger indoor environments, there is less air volume to dilute these chemicals, meaning even short periods inside a new car can result in noticeable exposure.

The oily film that accumulates on the interior windscreen is a direct product of this chemistry: VOCs released by dashboard plastics, seat materials, carpeting, and adhesives condense on the cooler glass surface, forming a nucleation site that accelerates fogging. A clean, smooth glass surface is less likely to fog as quickly or as densely as a contaminated one because it offers fewer anchor points for condensation to begin.

The anti-fogging formulation in Polyglaze Invisible Glass works by creating a hydrophilic surface that causes moisture to spread into a thin, transparent sheet rather than beading into vision-obscuring droplets. This is particularly relevant in Australian winter mornings and high-humidity coastal conditions.

****Critical mistake to avoid:**** Never use household glass cleaners containing ammonia on car interior glass. Ammonia-based formulations leave a film that increases fogging, and they can damage window tint films and degrade rubber seals around the glass perimeter.

****Selleys Polyglaze Upholstery Cleaner**** addresses fabric seats and carpets with a foaming spray format that minimises liquid penetration — the over-wetting problem that causes foam saturation, mould growth, and odours that outlast any air freshener. The foam lifts and suspends soils rather than driving them deeper with excess water. The correct technique is to apply foam, agitate with the built-in scrubber lid from the outside of the stain inward, and blot (never rub) with a clean, dry microfibre cloth.

For the complete interior cleaning sequence — including the critical top-to-bottom, dry-before-wet order that prevents cross-contamination between glass, dashboard, and upholstery — see our guide on **The Complete Car Interior Cleaning Checklist**.

The Cross-Cutting Insight: Why Sequence Is as Important as Product Selection

This is the original analysis that no individual cluster article can provide: ****the order in which you perform automotive care tasks is as important as the products you use****. Performing steps out of sequence doesn't just reduce effectiveness — it actively causes damage.

Consider the consequences of sequence errors:

- ****Washing before contamination removal:**** Bug acids and tar are spread across the paint surface by the wash mitt, grinding hardened exoskeletons across the clear coat and creating swirl marks across previously clean panels. - ****Polishing before washing:**** Abrasive polish applied to a surface still carrying road grit becomes sandpaper. Every micro-particle of grit dragged under a polishing pad leaves a scratch. - ****Applying interior protectant before cleaning glass:**** Overspray from dashboard protectant onto glass creates the most persistent interior film — one that requires multiple passes with glass cleaner to remove and that accelerates fogging until fully eliminated. - ****Conditioning rubber seals before cleaning them:**** Protectant applied over contaminated rubber seals traps grime beneath the protective layer, preventing proper substrate adhesion and reducing the effective service life of the treatment. - ****Waxing before polishing:**** Wax applied over oxidised clear coat seals the degraded material beneath it, providing a cosmetically improved surface that continues to deteriorate underneath the protective layer.

The correct master sequence for a full vehicle detail is:

1. ****Pre-rinse**** in shade to remove loose grit
2. ****Bug and tar removal**** with Polyglaze Bug & Tar Remover and dedicated microfibre cloth
3. ****Full wash**** with Polyglaze Sparkling Wash (or Wash & Wax if no existing protection layer)
4. ****Dry**** with high-GSM microfibre drying towel, blotting not dragging
5. ****Polish**** with Polyglaze Liquid Polish where correction is needed
6. ****Headlight restoration**** if lenses require treatment
7. ****Vinyl, rubber, and trim conditioning**** with Polyglaze Interior Protectant
8. ****Interior glass**** with Polyglaze Invisible Glass (sprayed onto cloth, not directly onto glass)
9. ****Dashboard and hard trim**** with Polyglaze Interior Protectant
10. ****Upholstery and carpet****

with Polyglaze Upholstery Cleaner 11. ****Odour treatment**** as the final step

This sequence ensures that each step works on a correctly prepared substrate, that no product from one step contaminates the surface treated in the next, and that the protective layers are applied in the correct order from the outside in.

The Australian Climate Factor: Why Local Conditions Demand a More Rigorous Approach

Australian conditions create an accelerated degradation environment that makes the protection protocols in this guide more urgent, not less. Australia receives some of the highest UV radiation levels in the world — the UV Index regularly exceeds 11 (Extreme) across Queensland, Western Australia, and the Northern Territory for the majority of the year. Ozone concentrations in major Australian cities frequently exceed the thresholds at which EPDM rubber degradation begins. Coastal environments add salt aerosol contamination to the threat matrix, accelerating corrosion in enclosed body cavities.

The practical implications for Australians:

- ****Exterior plastic trim and tyre sidewalls**** in Queensland, WA, and NT climates require conditioning reapplication every 4–6 weeks, not the 8–12 week schedule appropriate for temperate climates. - ****Bug season**** in Australia is extended by the warm climate — the window for bug damage is longer and the heat-acceleration of acid etching is more severe than in Northern Hemisphere conditions. - ****Stormwater regulations**** under Australian environmental law create a legal obligation for responsible wash run-off management that does not exist in many other jurisdictions. - ****Interior VOC concentrations**** peak more severely in Australian summer conditions, where parked car interiors can exceed 70°C — a temperature at which plasticiser migration doubles in speed and VOC off-gassing rates increase dramatically.

Research measuring VOCs in a new car for 12 days under different environmental conditions detected formaldehyde with an average concentration of 82.7 µg/m³ and a peak concentration of 223.5 µg/m³, well above the EU formaldehyde limit of 62 µg/m³. Increasing air and material surface temperature generally increases VOC concentrations.

Maintenance Frequency Guide: How Often Each Surface Needs Attention

One of the most common questions in automotive care is not **how** to treat a surface but **how often**. The answer depends on three variables: surface type, climate, and storage conditions (garaged vs. outdoor-parked).

| Surface | Garaged / Temperate | Outdoor / High-UV | |---|---|---| | ****Bug and tar removal**** | After every highway trip | After every trip in bug season | | ****Full wash (Sparkling Wash or Wash & Wax)**** | Every 2–4 weeks | Every 1–2 weeks | | ****Polish (Liquid Polish)**** | Every 3–6 months | Every 2–3 months | | ****Exterior plastic trim conditioning**** | Every 8–12 weeks | Every 4–6 weeks | | ****Rubber door seal conditioning**** | Every 12 weeks | Every 6–8 weeks | | ****Tyre sidewall treatment**** | Every 8 weeks | Every 4–6 weeks | | ****Interior glass (Invisible Glass)**** | Every 4–6 weeks | Every 4–6 weeks | | ****Dashboard and trim (Interior Protectant)**** | Every 6–8 weeks | Every 4–6 weeks | | ****Upholstery cleaning**** | As needed / every 3 months | As needed / every 3 months | | ****Headlight assessment**** | Every 6 months | Every 3–4 months |

A useful field test for rubber seals that requires no tools: if you can flex a section of door seal between your fingers and it resists rather than compresses easily, plasticiser depletion has already begun. Condition immediately.

Frequently Asked Questions

****Q: How long does it take for bug splatter to permanently damage my paint?****

Permanent etching can begin within 24–48 hours of impact in normal conditions, and can occur within hours on a hot summer day when the car is parked in direct sun. Research from the University of Florida found that insect residue drops from near-neutral pH 6.5 to an acidic pH 4.25 within 24 hours — the point at which clear coat etching begins. The safest rule: treat bug splatter within 12 hours, and always within 24. For the correct removal process, see our guide on [*How to Remove Bugs and Tar from Your Car Without Damaging the Paint*](#).

****Q: Can I use household glass cleaner on my car's interior windscreen?****

No — and this is one of the most damaging common mistakes in car care. Household glass cleaners typically contain ammonia, which leaves a film that increases interior fogging, can damage window tint films, and degrades the rubber seals around the glass perimeter. Use a purpose-formulated automotive glass cleaner such as Selleys Polyglaze Invisible Glass, which is specifically engineered to remove the oily VOC-derived film that accumulates on interior glass and provides anti-fogging performance. Always spray onto the cloth, not directly onto the windscreen, to prevent overspray onto the dashboard.

****Q: What's the difference between Polyglaze Sparkling Wash and Wash & Wax — and does it really matter which one I use?****

It matters significantly. Polyglaze Sparkling Wash contains anti-rust agents designed to protect enclosed body cavities where ordinary detergents can promote corrosion — it is the correct choice when an existing wax layer is in place or when preparing for a dedicated polish. Polyglaze Wash & Wax deposits a wax layer with every wash, providing UV protection and hydrophobicity for cars without a recent wax treatment. Using Wash & Wax over an existing professional ceramic coating can cause product build-up. Using Sparkling Wash on an unprotected daily driver leaves the clear coat without UV defence between washes. For the full decision framework, see our guide on [*Car Wash vs. Wash & Wax: Which Selleys Polyglaze Formula Is Right for Your Car*](#).

****Q: My headlights look yellow and cloudy. Can I fix them myself, or do I need a professional?****

It depends on the severity. At Stage 1 (light haze, no yellowing), Selleys Polyglaze Liquid Polish can restore clarity. At Stage 2 (visible yellowing, dull appearance), a polishing compound and microfibre cloth will address the oxidised layer. At Stage 3 (pitting, surface crazing, amber tint), multi-stage wet sanding is required — achievable as a careful DIY project, but with meaningful risk of uneven results. Research revealed that deteriorated headlights, when used on low beam, provided just 22 percent of the amount of light a new headlight does when operating at full capacity — so assessment and action are genuinely safety-critical. At Stage 4 (yellowing visible from inside the lens), professional restoration or replacement is the only viable option.

****Q: Is it safe to use a regular sponge to wash my car?****

No. Even though sponges feel gentle, their flat, porous surface traps grit and drags it across the paint during use — creating the circular micro-scratches known as swirl marks that are particularly visible on dark-coloured vehicles. Quality microfibre wash mitts use split fibres engineered to lift and trap particles inside the fibre structure rather than dragging them across the surface. Use a dedicated wash mitt for upper panels, and a separate one for the lower third of the car (sills, rocker panels, wheel arches) where grit load is highest.

****Q: My rubber door seals are starting to crack. Can conditioning still help?****

Once rubber polymer chains have broken through oxidative chain scission, the damage is irreversible — no conditioner can restore broken molecular bonds. However, conditioning at the early stage of deterioration (minor surface hardness, slight dulling) slows the progression significantly by replenishing

surface protection and blocking further UV and ozone attack. If cracking is already visible but shallow, conditioning will slow further deterioration and maintain sealing function. Deep cracking that compromises the seal's compression function requires professional replacement. The key is early intervention — treat rubber seals on a regular schedule before cracking begins, not after.

****Q: Why does my windscreen keep fogging up even after I clean it?****

Interior windscreen fogging is primarily a chemistry problem, not a cleaning failure. Air pollution in automotive cabins primarily results from VOCs and carbonyl compounds emitted from interior materials — these gases condense on the cooler glass surface, forming an oily film that provides nucleation sites for water droplet formation. If the film is not fully removed with a purpose-formulated automotive glass cleaner (not household glass cleaner), or if any dashboard protectant overspray has reached the glass, the fogging will return rapidly. Use Selleys Polyglaze Invisible Glass, applied to a cloth rather than sprayed directly onto the windscreen, and ensure no protectant residue from dashboard cleaning remains on the glass.

****Q: What are the environmental rules around washing my car at home in Australia?****

Under Australian environmental law, wash water containing detergents must not enter the stormwater system. The South Australian EPA requires all wash water to be diverted to garden or soakage areas. Practically, this means washing on grass or a permeable surface where run-off soaks into soil, or directing run-off to a garden bed if washing on a hard surface. Using the correct dilution ratio (30mL of product per bucket) reduces total surfactant load in run-off. This is a legal obligation, not merely a recommendation.

Key Takeaways

1. ****Car cleaning is protective maintenance, not cosmetic upkeep.**** Every contaminant on your vehicle is engaged in an active chemical or physical degradation process. The aesthetic consequence — a dull, stained, or faded surface — is the visible endpoint of damage that began hours or days earlier.
2. ****UV radiation is the master accelerant.**** It degrades clear coat independently, accelerates bug acid etching, drives headlight lens oxidation, attacks rubber seals, and breaks down plastic trim UV stabilisers. Every other protection measure is more effective when UV exposure is reduced or blocked.
3. ****Different surfaces require different chemistry.**** Paint wax on rubber seals, petroleum dressings on tyre sidewalls, and household glass cleaner on interior windows are not just ineffective — they actively accelerate the degradation they appear to address. The Selleys Polyglaze system provides substrate-specific chemistry for each surface type.
4. ****Sequence is as important as product selection.**** Contamination removal before washing, washing before polishing, polishing before protection, and interior glass before dashboard — each step must work on a correctly prepared substrate or it reduces the effectiveness of everything that follows.
5. ****The headlight lens is a safety-critical surface, not a cosmetic one.**** AAA research reveals that clouded or yellowed headlights generate only 20 percent of the amount of light that new headlights do. With 50 percent of crashes occurring at night, headlight maintenance is one of the highest-return safety interventions available to any car owner.
6. ****Australian conditions demand a more rigorous schedule.**** High UV index, extended bug seasons, urban ozone levels, and extreme summer interior temperatures accelerate every degradation mechanism described in this guide. The maintenance frequencies appropriate for temperate climates are insufficient for most Australian conditions.
7. ****Prevention is always cheaper than correction.**** A tube of bug remover costs a fraction of a panel respray. A bottle of rubber conditioner costs a fraction of door seal replacement. A headlight polish

costs a fraction of lens replacement. The entire Selleys Polyglaze system exists at the prevention layer — the most cost-effective point in the degradation curve.

Conclusion: A Whole-Vehicle Approach to Automotive Protection

The most important shift this guide asks you to make is conceptual: from thinking about car care as a collection of isolated tasks to understanding it as a unified, surface-specific protection system. Bug removal protects the same clear coat that wax maintains and polish corrects. Rubber conditioning preserves the same seals that water ingress would corrode if they failed. Interior glass cleaning removes the same VOC-derived film that off-gasses from the dashboard you condition. These are not separate problems — they are interconnected expressions of the same underlying reality: every material in your vehicle is in a constant state of degradation, and the rate of that degradation is determined by what you do or don't do.

Wax coatings remain widely adopted due to their affordability and ease of use, though they offer limited longevity. Ceramic coatings provide superior hardness, hydrophobicity, and resistance to scratches, corrosion, and UV degradation, albeit with higher costs and complex application procedures. The Selleys Polyglaze system occupies the accessible, effective middle ground: products that deliver genuine chemical protection across every substrate type, at a cost and complexity level that supports consistent, regular application — which is, ultimately, the single most important variable in automotive surface protection.

The cluster articles in this series provide the depth on each individual topic. This pillar page provides the framework that connects them. Together, they represent the complete body of knowledge required to protect every surface of your car — correctly, consistently, and in the right order.

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