### BACKGROUND AND HISTORY OF VEHICLE PROTECTION

1935 Development begins to create a solution to protecting the paintwork on vehicles against oxidization, fading & discolouration and to find a way to reduce maintenance such as the need for on-going waxing & polishing.

1970'S/1980'S The beginning of Car Care in Australia (as we now know it); brands such as MING, Truseal, & Waxguard emerge and are offered across dealerships nationally.

- » The key ingredient in most paint protections was silicone (a synthetically produced rubber).
- » Paint protection had limited warranties, or the warranty stated the product must be inspected and reapplied annually (at a cost to the customer).

1980'S The introduction of paint protection products that also offered some protection against the damage caused by bird droppings and tree sap.

- » The key ingredient in most paint protections was a fluoropolymer (PTFE) commonly described as Teflon-like formulas.
- » A neutralizing agent was added to the formula to help dilute the level of acid present (in particular) in bird droppings.
- » Warranties were limited and/or required annual inspection/reapplication (as in the case of the brand Defense Pak Vehicle Protection)

1990'S No significant changes in technology – new brands continue to emerge into the marketplace.

- » The new millennium This bought significant changes with the introduction of nanotechnology to develop a whole new generation of coatings.
- » The key ingredients ranged from the use of resins, to titanium dioxide.
- » Warranties for many products were in most cases extended to Lifetime (with terms & conditions such as non-transferable).

2010 TO PRESENT The beginning of Nano-Ceramic technology in paint coatings.

- » The key ingredient Silicon Dioxide (silica or quartz based).
- » Warranty periods (dependent on the supplier) from 7 10 years to Lifetime.

2017 Further advancements in Nano-Ceramic technology including OMNI Nano-Ceramic Surface Coating

» The key ingredients – Silicon Dioxide and Silicon Carbide



### WHAT DO ALL THESE INGREDIENTS MEAN?

**SILICONE:** A synthetically produced rubber that is used in a wide range of applications including as a water-proofing agent in building and renovations. It is also used in cosmetics, hair care and was widely used in paint protections during the 1970's and 80's.

Silicone was removed from most formulas due to the problems with paint repair and touch-ups – the silicone caused the paint to ball. Silicone-based paint protections were often referred to as "a panel beater's nightmare."

**FLUOROPOLYMERS/PTFE:** Commonly known under the brand of Teflon (Du Pont discovered how to make PTFE during the 1950's and started production of the first non-stick cookware). Teflon-like formulas were known for their high gloss properties and reduced maintenance. These products however were broken down by constant exposure to dirt & road grime (hence the need to reapply or the limited warranties).

TITANIUM DIOXIDE: Used in most sunscreens due to the UV protection properties. Also used in some house paints.

NANOTECHNOLOGY: Often referred to as the "Science of Small".

Nano is a measurement – 1 nano = 1b metre. Nanotechnology involves working at the molecular level. The benefit to using this technology is that it creates coatings that provide superior coverage and protection to the coated surface.

SILICONE DIOXIDE: An abundant mineral that can be found in a number of forms such as quartz and silica (sand). Silica is the main ingredient in the production of glass & crystal ware. This ingredient produces coatings that enhance paintwork, provide protection against UV (which means the paintwork will not oxidize, discolour or fade), and protects against the damage caused by environmental contaminates such as bird & bat droppings, tree sap, bug splatter, permanent water marks & rail dust. Quartz is rated as a 7 out of 10 on the Moh's Hardness Scale.

#### SILICON DIOXIDE IS A TRADITIONAL CERAMIC.

**SILICONE CARBIDE:** A synthetically produced substance by combining Silicon Dioxide with Carbon. Used in the manufacture of brakes for high performance vehicles, clutches and the plates that slide into bullet-proof vests. Adds hardness and durability to coatings. This ingredient provides resistance to the abrasion caused by weathering, dirt & roadgrime (ie the coating is not broken down). Silicon Carbide is rated as a 9 on the Moh's Hardness Scale.

SILICON CARBIDE IS AN ADVANCED CERAMIC.

# NANO-CERAMIC SURFACE COATING FOR PAINT SUMMARY OF FEATURES AND BENEFITS

- » A combination of traditional and advanced ceramics that delivers a coating that outperforms many other coatings.
- » SILICON DIOXIDE (SILICA), a traditional ceramic that provides gloss and shine, protects against damaging UV which means the paintwork will not oxidize, fade or discolour, and also protects against damaging environmental contaminates such as bird & bat droppings, tree sap, bug splatter, permanent water marks and rail dust.
- » SILICON CARBIDE, an advanced Ceramic that creates durability and hardness. Unlike traditional paint protection products, Nano-Ceramic Surface Coating is not broken down by weathering, dirt & road grime.



## NANO-CERAMIC INTERIOR PROTECTION

This coating is unique in that it is suitable for application to a wide range of interior surfaces including vinyl, leather, plastic and carpet & fabric surfaces.

As for Nano-Ceramic Surface Coating for Paint, the Interior Protection can be offered on vehicles up to 5 years old (60 months) from date of first registration.

The key ingredient in the formula is a copolymer. So what is a copolymer? A monomer is a molecule that can be bonded to another to form a polymer. A copolymer is when identical polymers are bonded which means they create superior bonding and ultimately superior protection.

The interior formula does not contain any silicone. Silicone when used on interior surfaces (particularly around the dash area) can vaporise when exposed to extreme heat.

» This results in fogging on the glass which can be difficult to remove.

### SUMMARY OF FEATURES AND BENEFITS

- » An advanced all-in-one formula suitable for all interior surfaces.
- » Copolymer formula does not contribute to fogging on glass and windscreens.
- » Creates superior stain resistance to all common food & drink spills including coffee, soda, water, milk and baby formula as well as makeup and sunscreen.
- » Prevents UV induced cracking & splitting of vinyl & leather, and prevents discolouration and fading of all coated surfaces.
- » Helps reduce mould and mildew on soft fibres including fabric seats and carpets.
- » Once-off no reapplication required.
- » Offer during a personal consultation in-store.
- » Offer as a package that may also include a window film.
- » Harness the OMNI advertising & promotional activities
- » Ask the customer if they have heard of Nano Ceramic
- » Remember that customer who have recently purchased their vehicles may have had a presentation of a similar product
- » Leverage off this and turn this into a positive experience.