

TITANIUM KINETIC

Advanced Nanotechnology Paint Protection

Titanium Oxide + Silica Oxide + Carnauba Wax
+ Fluoropolymers + Synthetic Resins

Titanium Kinetic Advanced Nanotechnology Paint Protection has generated remarkable results on treated new and second hand vehicles, acting as a form of prevention and protection of the appearance and value of automobiles.

Modern paint finishes consist of a primer layer, colour layer and clear coat layer. Combined these layers commonly have a depth of between 50 and 200 micrometers (or microns). (N.B. American automotive specialists refer to paint in mils, which is actually 1000ths of an inch, There are 25 microns in a mil.) The clear coat layer is the most exposed and can therefore have uneven surface finish. Damage to the surface can be rectified with buffing and polishing, as long as it is confined to the clear coat layer (the first 100 microns).

Common pollutants such as cement dust and pollen have a diameter size of between 1 and 500 or microns.

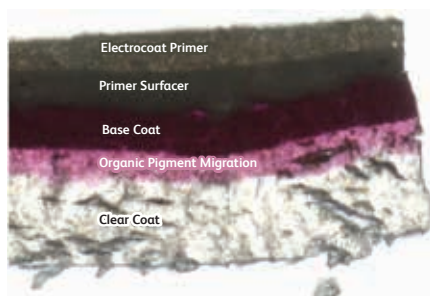
Carnauba wax particles have a diameter of 4 to 8 microns, and when bonded together and adhering to a painted car body have an ability to physically prevent these larger particles from penetrating on and into surface paint layers.

Carnauba wax can provide an homogenous surface layer, reducing friction and the ability of contaminants to "cling" to this surface layer.

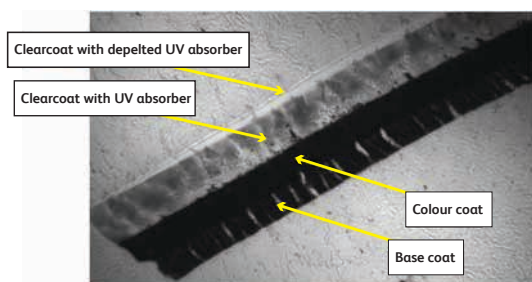
Fluoropolymers typically create layers that are 50 nanometers deep, or .05 of a micron. Similarly, Titanium Oxide can be used in particle sizes of approximately .1 of a micron. These NANO particles form the basis of quality paint protection and combine to form an interlocking, impenetrable layer against larger pollutant molecules.

With the exclusive mix of high end ingredients Titanium Kinetic has a phenomenal protective and low maintenance effect on Australian vehicles. This includes prevention of short term damage from bird droppings, bat droppings, tree sap, bug splutter, acid rain, berry & fruit stains, grease and road tar, grime, industrial fall out, salt spray, watermarks, heat and UV rays. These Australian environmental factors may lead to long term damage such as discolouration and fading, oxidation which can be detrimental to the appearance and value of one's vehicle.

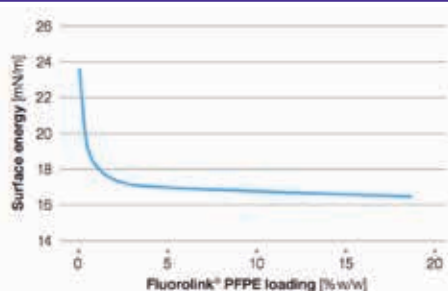
Titanium Kinetic Advanced Nanotechnology Paint Protection has protected vehicles in every Australian state and climate. This has given owners and families the peace of mind that they can enjoy their lifestyle and travels, whilst appreciating easy cleaning features and benefits.



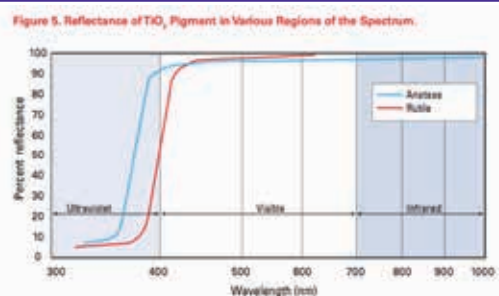
Cross section of red paint from a Mazda 3



Paint electron microscope



The effect of fluoropolymers on surface energy



Titanium Oxide reflectance across the light spectrum



What does Boeing Specification D6-17487 mean for my car?

Boeing is the world's largest aerospace company and leading manufacturer of commercial jetliners and defence, space and security systems.

Boeing has a long tradition of aerospace leadership and innovation. Its broad range of capabilities includes creating new, more efficient members of its commercial airplane family; integrating military platforms, defence systems and the war fighter through network-enabled solutions; creating advanced technology solutions; and arranging innovative customer - financing options.

With nearly 700 planes being manufactured by Boeing each year, and nearly 18000 built since 1974 Boeing has a high standard for aviation safety. To facilitate this standard, Boeing specifies the nature and type of products which can be used to maintain their aircraft. These specifications are comprised of a battery of ASTM tests, completed under laboratory conditions.

Boeing Specification D6-17487 is used to confirm that products which include

exterior and general cleaners, liquid waxes, polishes, and polishing compounds can be used to service Boeing commercial aircraft.

The battery of tests includes American Standard Tests F1110, F484, F502 and F519.

ASTM F1110 is a Sandwich Corrosion Test - specimen metals are treated with a product and after a test period, cannot demonstrate more corrosion than untreated samples.

ASTM F484 is an Acrylic Crazeing Test. The product being tested is applied to samples of acrylic plastic which are stretched to an outer fibre stress. The plastic cannot craze, crack or etch after application.

ASTM F502 is a paint softening test. This test method covers determination of the effects of cleaning solutions and liquid cleaner concentrates on painted aircraft surfaces. Streaking, discoloration, and blistering may be determined visually. Softening is determined with a series of specially prepared pencils wherein

determination of the softest pencil to rupture the paint film is made. Tested materials shall not product a decrease in film hardness greater than two pencils, nor will it discolour or stain the treated surface.

ASTM F519 is a hydrogen embrittlement test. Cadmium plated samples are matched with the test product and subjected to failure testing for 150 hours at 45 % load.

Failure to comply with any of the four ASTM procedures completely will render the test product incompatible with Boeing commercial aircraft.

So, what does Boeing Specification D6-17586 mean for my car? Simply put, the rigorous battery of tests assessed by Boeing as necessary to protect the integrity of their aircraft surfaces and its safety record are the currently accepted industry standard as the best indicator of automotive paint protection.

TITANIUM KINETIC

- Tested under extreme environmental and atmospheric conditions.
- Provides extensive warranted protection at variable temperatures
Shields against damaged caused by Australian flora and fauna, including:
 - Acid rain, berry & fruit stains, bird & bat droppings, bug splutter, colour fading, oxidisation, grease, road tar, grime, industrial fallout, salt spray, tree sap and watermarks.
- As a result, Titanium Kinetic assists in keeping the new or second hand vehicle in the best possible condition