

JADE PREMIUM CERAMICS: FREQUENTLY ASKED QUESTIONS

Concept

Why do I need Jade Ceramic Coatings?

Ceramic coatings are designed to defend the painted surface against contaminants and prevent them from bonding to the surface by making the surface very hydrophobic.

Additionally, they create a very hard shield to protect against minor scuffs and abrasions and are extremely durable in terms of protection, in some cases up to four years.

What are Jade ceramic coatings?

Ceramic coatings are neatly ordered arrangements of Silicon (Si) and Oxygen (O) atoms in a 3D polymeric framework. This nano-ordering causes a highly durable, glass-like coating to form that is responsible for greatly increased durability, chemical and mar resistance, UV stability and hydrophobic properties. Ceramic coatings allow for an easier to maintain automotive finish that is more maintenance friendly.

What are the differences between Jade Ice, Quartz and Edge? Which product do I use for a specific application?

All are based on the same constituent technology, but differ in their formulary blend to suit specific application needs.

Jade Quartz (9H) was formulated with the highest level of concentration of active ingredients along with many additives to allow it to provide the most robust coating offered, ideal for ridged, painted surfaces, it is our premium ceramic and lasts up to 4 years.

Jade Ice (7H) is for the same application as above, however is slightly less durable up to two years. Designed to have a solvency that provided a lot of open time and an easier application as well as limited flexibility.

Jade Edge (4H) is a less concentrated product that was designed for reviving or protecting exterior trim parts, vinyl and plastics. It also offers the greatest flexibility.

Where can I use Jade Ceramics?

All three Jade ceramic formulas can be used on multiple surfaces including paint, wheels, plastic, rubber moldings, glass and gel coat surfaces.

How long will Jade ceramics last?

While this depends on various factors, weather, exposure to harmful materials and recommended



Is there a Puris guarantee?

Yes, our Jade Quartz and Jade Ice kits do come with a guarantee* card, signed by a Puris chemist, Covering a period of four and two years respectively.

PURIS guarantees against the ceramic coating cracking, bubbling, peeling or color change with loss of gloss not more than 25%. This guarantee is valid while the installation and maintenance are carried out in accordance with the manufacturer's recommended procedures A61 Ceramic Detox Shampoo & A68 Jade Reboot detail spray. The original purchaser must also retain ownership of the vehicle for the guarantee to be valid.

Do hydrophobic coatings fade with time, & why? Is there something wrong?

Over time, like typical topcoat, contaminants and pollutants will find a way to bind to the ceramic coating and will begin to affect the hydrophobic effect that is a hallmark of a ceramic coating. Simply using the A61 Ceramic Detox Shampoo or a Puris cleaner will help remove the contaminants and return the coating back to its original, hydrophobic state.

Can I clay my vehicle after having a Jade Ceramic Coating applied?

While you could, it's recommended not to clay a surface that has a ceramic coating applied as it may affect its durability.

Technology

Where did ceramic technology in automotive applications originate?

Ceramic Coating technology was first used around 12 years ago in Asia and in particularly China as the method to prevent acid rain from contaminating the urethane paint surface, whereby acid rain would sit on the surface, dry and etch into the paint film causing permanent damage. Once ceramic coatings are applied the surface becomes extremely hydrophobic which promotes water shedding from the surface not allowing droplets to sit as easily.

What does nano-mean in the context of ceramic coatings?

Nano, in the context of ceramic coatings, denotes chemistry that is happening on an atomic scale. The neat ordering of molecules provides a very low energy state that is highly stable.

What is 'Hardness' and how are the Jade Ceramic Coatings measured for their relative hardness?

Hardness is measured according to ASTM D3363 Film Hardness by Pencil. A 9H graphite pencil is applied with a specific weight or pressure at a 45 degree angle relative to the coating and moved 2" in distance, repeated in triplicate, starting with the hardest pencil (9H). If the coating is damaged or deformed then the next lower hardness pencil is measured until the film or coating shows no change.

What makes these coatings considered to be 'ceramic' and not 'glass' coatings?

Glass is considered an amorphous solid and does not have a long-range ordering or arranging of its molecules. While ceramic is a highly ordered, crystalline structure at a very low energy state – which makes it very durable and stable causing it to also be highly resistant to chemical reaction.

Can heat or frost harm the Jade Ceramic Coating protection after it has had an opportunity to cure?

No, the coating is very stable and highly resistant to temperature fluctuations. In fact, heat in excess of 100-300°C will drive the coating to further crosslink and cure further. While, low temperatures, even in excess of -40°C, will never cause the ceramic coating to crack, peel or delaminate from the surface.

Are Jade Ceramics approved by anyone?

Yes, Jade Ceramics are approved by Boeing Aerospace to their rigorous quality testing and endorsed to their D-6 17487T standard.

Preparation

Do I need to prepare the paint surface?

Highly recommended, yes. Any scratch or swirl or blemish existing on the paint that is then coated, becomes locked in and will remain visible, and protected.

It is advisable to sand out heavy scratches, polish out light scratches then polish out light swirls with our Puris compounds and Puris Polishes using a rotary or Dual Action (DA) machine for a flawless finish, then wipe clean with alcohol to ensure a grease free, dust free surface. Then apply the Jade ceramics.

Full preparation tips & steps can be viewed at www.puris.org

Do I need to prepare the plastic/vinyl/rubber/trim or gel coat surface?

Simply ensure it is clean and dry.

Application

How are Jade ceramic coatings applied?

Jade coatings are applied via a lint free, suede wrapped, foam applicator, or similar. Run a bead of product on the block and apply in straight lines with 50% overlap onto areas approximately 3' x 3' (900mm x 900mm) or less at a time.

Once the product has had a few moments (1 to 5 minutes depending on the temperature) to volatilize, seen by a "rainbowing effect", the excess material is gently removed using a low nap microfiber cloth and buffed to a high gloss.

Keep turning the microfiber towel while wiping down, until there are no streaks and the towel glides across the surface.

This process is repeated on each subsequent cross-section of the automobile until it is completely coated.

How long before I wipe down the Jade ceramic coating?

On average anywhere from 1 to 4 minutes depending on the ambient temperature, the colder it is the longer you leave it to set up and volatilize. The hotter it is the faster it will dry. As soon as it becomes tacky wipe it down.

How long until my vehicle can get wet or have water introduced to the surface?

It's recommended to prevent water from coming into contact with the curing ceramic coating for the first 12-24 hours after being applied if air dried. If force cured you can wet immediately.

If within 24 hours water does find its way to the surface, it will not damage the coating, simply wipe it off with a microfiber cloth.

Why do you not want to apply Jade Ceramic Coatings in direct sunlight; won't this only help the coating cure?

The active ingredients in the ceramic coating are held dormant by being contained in a volatile solvency, a lot of which is responsible for the method of application. If the surface for the coating to be applied to is too hot then the solvency will volatilize too quickly and the application will be deleteriously effected.

Can I apply two or more coats Jade Ceramic Coatings?

Yes, Jade Ceramic Coatings are designed to have the option for layering or stacking – this allows for even greater durability.

Simply allow for one hour of cure time between applications of additional coats. Wipe the previous coat down to flatten and repeat.

MAINTENANCE

Can I apply traditional waxes and sealants like paste wax over my Jade Ceramic Coating?

Yes, however waxes and sealants won't have their typical levels of durability on a ceramic coating as the coating will try to shed the waxes and sealants instead of letting them bond.

Never apply ceramic coating over the top of a previous wax or sealant, ensure that the ceramic coating is applied directly to the prepared substrate or clear coat.

Can I apply Jade ceramics on fresh paint?

No, you should allow the paint to fully cure for one month to allow all solvents escape from the paint.

Can I apply Jade Ceramic Coatings over my film chip protector on the nose of the vehicle?

Yes, this will increase the longevity of the chip protector and help prevent it from discoloring.



How do I remove the Jade Ceramic Coating?

Jade ceramic coatings cannot be chemically stripped and require mechanical abrasion such as compounding with Puris A1+ or A1.

Do the Jade Ceramic Coatings delaminate, peel, flake or change color and yellow?

Jade Ceramic Coatings will never delaminate, crack, flake, peel or change color during the lifetime of the coating.

What is the shelf life & opening the Jade Ceramic Coating have?

Keep out of direct sunlight.

Typical shelf life for Jade Ceramic Coatings is two years. If the bottle has been opened and resealed, try to use the remainder of the ceramic material within three months of opening. The reason for this is that the ceramic coating reacts with moisture and if there is repeated exposure to atmosphere then the coating will begin to cure within the bottle – viscosity changes will be the best evidence of this.

