



Glossworks Ultimate Guide to Ceramic Coating: How to Protect and Enhance Your Vehicle's Shine & Value

Are you tired of your car losing its shine soon after a wash? Do you want to protect and enhance your vehicle's appearance? Look no further! Welcome to "The Ultimate Guide to Ceramic Coating," where we will walk you through the process of giving your vehicle that long-lasting, head-turning shine.

In this comprehensive guide, we will demystify the world of ceramic coating, a revolutionary technology that offers unparalleled protection for your vehicle's paintwork. Whether you're dealing with environmental contaminants such as brake dust and pollution, or UV, bird droppings, or even minor scratches, ceramic coatings act as a shield against them all.

In this guide we will also delve into the best techniques for applying ceramic coating for you DIYers, how Glossworks prepares your vehicles surface for optimal results, and how you can maintain that better than showroom-new look for years to come.

Enhancing & protecting your car's shine has never been easier, thanks to vehicle ceramic coatings. So, join us on this journey to discover the secrets behind this advanced technology and unlock the potential of your vehicle's appearance!

Understanding the benefits of ceramic coating

Ceramic coatings were a breakthrough in automotive protection and enhancement. Unlike traditional waxing, which provides temporary shine and protection, ceramic coatings offers long-lasting benefits. Its key advantages include:

1. **Superior protection:** Ceramic coatings form a protective layer over your vehicle's paintwork, shielding it from environmental contaminants such as dirt, dust, tree sap, bird droppings, and UV rays. This layer acts as a barrier, preventing these elements from adhering to the surface and causing damage. I like to think of it as a liquid screen protector, for your car.
2. **Enhanced durability:** Ceramic coatings are designed to be highly durable, providing long-lasting protection that can withstand the test of time. Unlike wax, which can wear off after a few weeks or even just a matter of days, ceramic coatings can last for several years with proper maintenance. Generally, these coatings have a minimum life of about 18 months. An estimated 70x increase in life over some waxes.
3. **Easier maintenance:** One of the most noticeable advantages of ceramic coating is its hydrophobic properties. This means that water and other liquids will bead up and roll off the surface, making it easier to clean and maintain your vehicle's shine. Additionally, the smoothness of the ceramic coating prevents dirt and grime from sticking, further reducing the need for frequent washing, which will also reduce scratching.
4. **Improved appearance:** Ceramic coatings enhance the visual appeal of your vehicle by giving it a deep, glossy shine. Some coatings fill in microscopic imperfections in the paintwork, resulting in a smooth, mirror-like finish. This not only makes your car look stunning but can increase its resale value.

Pro Tip: Car wash waxes typically only last around 1 week. This is why these cleans 'don't last'.



Key differences between ceramic coating and traditional waxing

While traditional waxing has been the go-to method for protecting and enhancing a car's shine for decades, ceramic coating offers several key differences that set it apart:

1. **Durability:** Wax provides temporary protection that typically lasts for a few days or weeks. On the other hand, ceramic coatings can last for several years, making them a more cost-effective and long-lasting solution.
2. **Protection against contaminants:** While wax can offer some protection against environmental contaminants, it is not as effective as ceramic coating. Ceramic coatings create a strong barrier that prevents dirt, dust, tree sap, bird droppings, and other contaminants from adhering to the surface, ensuring your car stays cleaner for longer.
3. **Resistance to UV damage:** UV rays can cause fading, discoloration, and oxidation of a car's paintwork. Traditional waxing provides limited protection against UV damage, but ceramic coatings have UV-resistant properties, effectively shielding your vehicle from these harmful rays.
4. **Ease of maintenance:** Wax can wear off easily and requires regular reapplication to maintain its shine and protection. Ceramic coatings, on the other hand, offer a low-maintenance solution. Their hydrophobic properties make it easier to clean your car, reducing the frequency of washing and saving you time and effort.

Pro Tip: *Some people like the look of hand applied waxes, which can be applied over ceramic coatings.*

How ceramic coating works

Ceramic coatings are made up of nanoparticles that bond chemically with the vehicle's paintwork. This bond creates a strong and durable layer that provides protection and enhances the appearance of the car.

The nanoparticles in ceramic coatings can fill in the microscopic imperfections in the paintwork, creating a smoother surface. This smoothness not only gives the car a glossy finish but also makes it more resistant to dirt and grime.

Additionally, the chemical bond formed between the coating and the paintwork ensures that it remains intact even under harsh conditions, with some coatings not just bonding on the surface like a layer of paint but penetrate the paint layer, forming a bond that's indistinguishable to the paint layer.

The hydrophobic properties of ceramic coatings are another significant aspect. These coatings repel water and other liquids, causing them to bead up and roll off the surface. This hydrophobic effect can take dirt off the vehicle as water beads off. It makes it easier to clean the car and reduces the chances of water spots or stains.

It is essential to note that ceramic coatings do not make a car completely scratch-proof. However, they do provide an extra layer of protection against minor scratches and swirl marks usually from cleaning making them *scratch resistant*. The hardness of the coating can help prevent these imperfections from reaching the paintwork, keeping your car looking pristine for longer, or making the thin paint able to be restored much easier in the future.

Pro Tip: *Some coatings rely on hardness such as 9h or 10h, while others have the ability to self-heal.*



Steps needed to prepare your vehicle for ceramic coating.

Before applying ceramic coating, it is crucial to prepare your vehicle's surface to ensure optimal results. Here are the basic steps Glossworks follow:

1. **Wash your car:** We start by thoroughly washing your car to remove any dirt, grime, or contaminants. In general, a pH-neutral car shampoo is recommended for the use on all paint work, but at this stage a 'stripping' cleanser is commonly used and a microfiber wash mitt to avoid scratching the paintwork further.
2. **Decontamination:** After washing, it's important we remove any embedded contaminants from the surface. A 'clay media' along with a clay lubricant is used by gently gliding this over the paintwork. This process dislodges bonded contaminants like tar, tree sap, and industrial fallout, leaving the surface smooth and ready for coating. Many times, chemical decontamination is needed, targeting these individual marks. Iron Remover to remove iron from brakes; Solvents for paint or tar; and surfactants and solvents for tree sap and bugs.
3. **Paint correction:** If your car has any swirl marks, scratches, holograms, or oxidation, it is recommended to perform a paint correction process before applying *any* ceramic coating. This involves using an abrasive substance such as compounds and polishers with machine polisher to remove or reduce these imperfections, restoring the paint's clarity and smoothness. Due to the thickness of paints, there are limits to the number of times this can be done before paint is 'burned through'. Paint correction is much like sandpaper, but very fine abrasives are used in the range of 10000 grit or higher. Incorrect use of polishers or polishing too often will 'burn though' the clear coat of your vehicles paint. However, used correctly 'Paint correction' ensures the best possible results and enhances the appearance of the ceramic coating. A side note on this: Because polishing removes physical paint, ceramic coating is one of the best methods to retain, and build upon, your clear coat and colour coat paint layers.
Pro Tip: Clear can begin to fail in as little as 5 years! Ceramic coatings can easily double this time.
4. **Surface preparation:** Once the paint correction is complete, it's important to thoroughly clean the surface again to remove any residue from the polishing process. We use a specialty 'panel wipe' for the ceramic process, though many detailers across the globe use a standard DIY solution for this to good effect and at around 5% that ours cost. The use of this is to ensure the surface is completely clean and free from any oils, waxes, or polish residue.

This step is crucial to ensure proper bonding of the ceramic coating maximizing its effectiveness and longevity.



Ceramic coatings: DIY or professional application?

When it comes to applying ceramic coating, you have two options: DIY or professional application.

DIY Application

Pros:

1. **Cost-effective:** Applying ceramic coating yourself can save you considerable money compared to paying for professional services. Ceramic coatings are readily available from Glossworks, and we are happy to guide you through the process.
2. **Flexibility:** DIY application allows you to do the coating when and where it suits you best. You can work at your own pace and take breaks as needed.
3. **Satisfaction:** There is a sense of satisfaction and accomplishment in doing the job yourself. Taking the time and effort to protect and enhance your vehicle's appearance can be a rewarding experience. I do it all the time so I know this well.

Pro Tip: Not all YouTube videos are good reference material, but Glossworks will help with this.

Cons:

1. **Skill and experience:** Applying ceramic coating requires a certain level of skill and experience to achieve optimal results. It involves meticulous attention to detail, proper technique and expensive tools, as well as knowledge of the specific product and process needed for that chemistry.
2. **Time-consuming:** DIY application can be time-consuming, especially if you are not familiar with the process. It requires careful preparation, sometimes multiple layers of coating, and curing time between each layer. And if doing paint correction prior to coating, this time can be in excess of 8+ hours.
3. **Risk of mistakes:** Without proper knowledge and technique, there is a risk of making mistakes during the application process. These mistakes can affect the effectiveness and durability of the coating and will almost definitely result in sub-par looks with "high spots". Though we try to arm you with as much knowledge prior to starting on the DIY journey, as well as having beginner friendly coatings.

Pro Tip: "High spots" are a term to describe coating that has built up higher than the rest of the coating, resulting in smears. These smears may need to be polished out, or possibly even sanded.

Professional Application

Pros:

1. **Expertise and experience:** The team at Glossworks are professional detailers who have the knowledge, training, skills, and experience to apply ceramic coatings with precision and efficiency. We understand the nuances of the process and can achieve optimal results with what ever coating you might choose from our line up.
2. **Timesaving:** Glossworks is typically faster than DIY, as detailers we have the necessary tools and equipment to streamline the process. We can efficiently prepare the surface, apply the coating, and ensure proper curing usually before the end of the day.
3. **Guaranteed results:** We often offer warranties or guarantees on our work, giving you peace of mind that the coating will be applied correctly and effectively, and last as long possible.



Cons:

1. **Higher cost:** Professional application is more expensive than DIY, as you are paying for the expertise and labour of the detailer not just the cost of the product. The cost will vary depending on the size and condition of your vehicle. But also consider the tools and equipment used, that you as a potential DIYer just don't have the budget for, from high end Italian polishers to the best case correction lighting made in Europe, and even specialised tools and products that are usually imported from America, England, or other such countries.
2. **Less control:** When you opt for professional application, you are entrusting your vehicle to someone else. While Glossworks does take great care, there is always a slight risk of damage or mistakes during the process. Our mobile process reduces this risk by containing your vehicle to your property, as well as being fully insured.

Both DIY and professional application have their advantages and drawbacks. Consider your budget, time availability, skill level, and desired results to make an informed decision.

Maintaining a ceramic coating for long-lasting protection

Once you have a ceramic coating to your vehicle, it is essential to maintain it properly to ensure long-lasting protection and shine. Here are some tips for maintaining ceramic coating:

1. **Regular washing:** Despite the hydrophobic properties of ceramic coatings, it is still important to wash your car regularly. With regular cleaning of your vehicle, proper technique and tools are needed to increase the life of all coatings, and the paint beneath. They include:
2. **Avoid harsh chemicals:** When washing your car, avoid using harsh chemicals or abrasive cleaning agents. Although designed to resist harsh products, over time these can degrade the coating and reduce its effectiveness. Where possible stick to gentle, pH-neutral products that are specifically designed for use on coated vehicles. Stay away from products that especially aggressive on the pH scale such as bleaches and acids, or abrasives such as Jif and related 'crème cleansers'.
Pro Tip: Avoid the use of 'wash and wax' products if possible as these can reduce the looks of the coating.
3. **Use proper drying techniques:** After washing, it is important to dry your car properly to prevent water spots. Use a microfiber towel or a blower to remove excess water, ensuring that the surface is completely dry. Using a blower method considerably decreases the time needed to maintain the vehicles appearance.
Pro Tip: Avoid air drying or leaving the car in direct sunlight, as this can lead to water spots and streaks.
4. **Avoid automatic car washes:** While ceramic coatings offer some protection, it is best to avoid automatic car washes that in particular use abrasive brushes or harsh chemicals. These will damage the coating and reduce its lifespan. Opt for handwashing or touchless car washes instead.
Pro Tip: Touchless washes are not safe on unprotected vehicles due to high pH caustic solutions needed to remove dirt.
5. **Regular inspections:** Periodically inspect your vehicle's paintwork to ensure that the ceramic coating is intact. Look for any signs of damage or degradation, such as water not beading up as it



should. If you notice any issues, consider getting the coating reapplied or seek Glossworks professional advice. This could be as simple as needing a basic decontamination clean.

Pro Tip: Coatings can 'clog' with water minerals and grime and may need a periodic deep clean.

6. **Avoid extreme conditions:** While ceramic coatings are designed to withstand various environmental conditions, it is best to avoid extreme situations whenever possible. For example, excessive exposure to direct sunlight, extreme heat, or harsh chemicals can potentially compromise the coating's effectiveness over time.

By following these maintenance tips, you can extend the life of your ceramic coating and enjoy long-lasting protection and shine for your vehicle.

Common misconceptions about ceramic coating

There are several misconceptions surrounding ceramic coatings with some of these myths coming from the industry or from sales people. Let's debunk some of the most common ones that we hear:

1. **Ceramic coatings make a car scratch-proof:** While ceramic coatings provide an additional layer of protection and reduce the likelihood of minor scratches and swirl marks and are often harder than the paint, they do not make a vehicle scratch-proof. Sharp objects, abrasive materials or even 'correct' washing methods can still cause damage to the coating and the paintwork beneath it if even only very slight. Think about the screen protector on your phone, does that have scratches?
2. **Ceramic coatings are permanent:** Ceramic coatings are long-lasting but not permanent. Over time, the coating will gradually wear off due to exposure to the elements and regular washing. However, with proper care and maintenance, the coating can last for several years. If you're wondering about "lifetime" coatings, think about all the peeling paint you see on cars in the region. If paint is bonded to the car permanently at the factory, but can still peel off over time, how long do you really think a lifetime coating can last when applied after the fact? This isn't to dissuade you as a consumer from thinking about these coatings, but consider that on average, a 'lifetime' coating is usually priced at around \$3000 - \$4000 as opposed to around \$1000 - \$2000 for those coatings that last around 3-10 years.
3. **Ceramic coatings eliminate the need for washing:** While ceramic coatings make it easier to clean your vehicle and reduce the frequency of washing, they do not eliminate the need for regular maintenance. Washing is still necessary to remove dirt, road grime, traffic film, and contaminants that can accumulate on the coating's surface. Like washing dishes with just cold water, there will always be grime and dirt that you need a 'soap' to remove.
4. **Ceramic coatings can be applied to any surface:** Many Ceramic coatings are designed specifically for automotive paintwork. They should not be applied to other surfaces such as glass, plastic, or chrome unless the product is explicitly formulated for those materials. And even when designed for other surfaces, these coating applications have a MUCH shorter life (Tyres -6 months, Leather - 6 months, Glass - 12-18 months).
Pro Tip: Tesla Cyber Trucks also benefit from ceramic coatings as these trucks will rust.
5. **Ceramic coatings can be applied once and forgotten:** To maintain the coating's effectiveness, periodic inspections and maintenance are required. Over time, the coating may require reapplication to ensure optimal protection and shine. All coatings have a limited life, usually measured years, rarely in decades or lifetimes.

Pro Tip: The longest life we have seen that we trust is around 25 years, but costs much more than a normal pro coating!



It is important to have realistic expectations about ceramic coatings and understand their limitations. While they offer significant benefits, they are not a magical solution that will completely protect your vehicle from all forms of damage. Knowing these things makes you an informed consumer, and hopefully a happy customer of Glossworks.

Comparing different brands and types of ceramic coatings

When it comes to choosing a ceramic coating, there are various brands and types available on the market.

Here are some factors to consider when comparing different options:

1. **Durability:** Look for coatings that offer long-lasting protection. Consider their expected lifespan and how well they withstand environmental conditions.
2. **Ease of application:** Some ceramic coatings require multiple layers and complex application techniques, while others are more user-friendly. Choose a coating that matches your skill level and comfort with DIY application.
3. **Hydrophobic properties:** Check whether the coating has excellent water beading and self-cleaning properties. A high-quality coating should repel water and prevent dirt and grime from adhering to the surface.
4. **UV resistance:** UV rays can cause fading and damage to your vehicle's paintwork especially here in our region. Opt for a coating that offers UV resistance to protect your car's appearance and ensure long-lasting shine.
5. **Warranty or guarantees:** Consider whether the brand offers any warranty or guarantee on the coating's performance. This can provide peace of mind and assurance of the product's quality. Check the wording of warranties as many are limited to a dollar value (for instance they might say: \$1500 total max lifetime claims) or limited to a claim volumes (for instance they might say: 2 re-applications only).

It is also beneficial to read reviews and seek recommendations from trusted sources or professional detailers.

They can provide insights into the performance and suitability of different ceramic coatings for your specific needs.



Frequently asked questions about ceramic coating

- 1. What are the benefits of ceramic coating?** Ceramic coatings offer a protective layer that shields paint from UV rays, scuffs, chemicals, and dirt. They also make washing and drying easier due to their hydrophobic properties.
- 2. How long does a ceramic coating last?** Durability varies depending on the product, application, and maintenance. High-quality coatings, professionally applied, can last several years with proper care with most coatings having a life of 3-5 years, but some coatings can last much longer than that.
- 3. Can I apply ceramic coating myself?** DIY application products exist, but the process requires careful paint preparation and following specific instructions. Professional application is recommended for best results.
- 4. What is the difference between ceramic coating and wax?** Ceramic coatings bond to the paint, offering superior protection and longevity compared to waxes, which provide a temporary layer of protection.
- 5. How do I maintain a ceramic coated car?** Use gentle washing techniques, pH-neutral soaps, and avoid harsh chemicals or abrasive cleaners. Maintain a regular washing routine to prevent contaminant buildup. These are the same products and processes that should be used when cleaning even an un-coated vehicle.
- 6. Will a ceramic coating hide existing scratches?** No, most ceramic coatings won't hide scratches. Paint correction (polishing) is usually needed before applying a ceramic coating for a flawless finish. However some products such as Gtechniq Crystal Serum ultra are designed to fill some very minor imperfections.
- 7. Can I ceramic coat my wheels and windows?** Yes, specific ceramic coatings are available for wheels and glass as well as many other surfaces, offering protection from brake dust, road grime, and water spots.
- 8. How much does a ceramic coating cost?** Costs depend on vehicle size, coating quality, and professional application vs. DIY. Prices typically range from a few hundred to several thousand dollars just in product cost. For DIY expect a minimum of around \$200, and for professional installations expect a minimum of \$1000.
- 9. Are there any drawbacks to ceramic coating?** The upfront cost can be higher compared to waxes. Additionally, improperly applied coatings can be difficult to remove. But besides these, no drawbacks in normal situations.
- 10. Who should I trust to apply a ceramic coating?** Easy - Glossworks.