

CERADUR® METAL

Ceramic coating specially developed for use as a dirt-repellent and protective coating on metal



Product description

Ceradur® Metal is a ceramic coating based on patented polysilazane technology. These unique ceramic coatings are also called glass coating or liquid glass, because the coating has comparable properties to glass. Ceradur® Metal is extremely chemically resistant and is resistant to corrosion-causing salts, paint, ink markers, and cleaners. Ceradur® Metal is ultrathin (0,1 – 3 µm) and transparent. Ceradur® Metal is suitable for metals due to its unique formulation. Treated surfaces can be provided with a food safety certificate after being tested by external parties.

Depending on the conditions and the coating offers protection against pollution, erosion, corrosion, and moisture for at least 3 years (this depends on the rate of atmospheric contamination and the environment the surface is in).

The method of application of Ceradur® products has a significant effect on the durability and quality of the coating. When in doubt or if you have any questions, always contact your Mavro International advisor.

Use

Ceradur® Metal is suitable for practically all ferrous and non-ferrous metals such as steel, aluminum, stainless steel, brass, copper, gold, and bronze. Provided that the coating is applied correctly, the applications are very broad, examples are traffic signs, aluminum rims, and industrial equipment/factories/ storage tanks.

Characteristics

- Protects against the penetration of salts and water
- Great hydrophobic and oleophobic properties
- Protects the surface from degradation due to corrosion
- Temperature resistant (up to ~250 °C)
- Can be applied in environments where food is processed.

Technical data

Odour:	Butyl acetate and ammonia
Colour:	Transparent
Specific weight:	0,94 kg/L
pH:	~ 10
Contains:	Organic polysilazane compound, n-butyl acetate, 3-aminopropyltriethoxysilane
Flashpoint:	~ 21 °C
Boiling point:	124-127 °C
VOC content:	Classification 1/sg-max 500/l, this product contains 430 g/l VOC

Application conditions

Ambient temperature:	maximum 30°C, minimum 10°C
Surface temperature:	maximum 30°C, minimum 10°C
Relative humidity:	max. 85% and 3°C above dew point

Instructions

Instructions on metal

1. 1. Work in a completely dust-free area to prevent dust particles from causing defects in the ultra-thin coating.
2. 2. Remove rust from oxidized metals and non-ferrous metals by treatment with Rust Remover and sanding or grinding (see Rust Remover product sheet for instructions).
3. 3. Thoroughly clean the surface in advance with Uniclean or Uniclean Low Foaming and rinse with water.
4. 4. Then degrease the substrate and dry with ISOPROPANOL
5. 5. Apply Ceradur® Metal with a power sponge, microfiber cloth or HLVP spray (nozzle: 0.8-1.2 mm, 2-3 bar). The coating can be applied with a light rubbing motion or in one smooth motion. Apply the product with a maximum layer thickness of 0,1-3 µm (approx. 10-12ml per m2). Exceeding the recommended layer thickness may cause the coating to have insufficient adhesion and affect the durability of the coating.

Instructions on car paint

6. 1. Work in a completely dust-free area to prevent dust particles from causing defects in the ultra-thin coating.
7. 2. Clean the car paint with car shampoo or Uniclean Low Foaming. Followed by paint correction and clay (optional). After cleaning it is important to degrease the surface with Isopropanol, the surface must be completely free of grease.
8. 3. After cleaning, the surface should not be hot, an application at temperatures between 20-30 °C is recommended, direct sunlight should also be avoided.
9. 4. The best way to apply Ceradur® Metal is to saturate a thin and smooth microfiber cloth. Apply the coating evenly and quickly with side swiping motion, always working in one direction.
10. 5. Use a soft microfiber cloth to polish the surface after 1-2 minutes. If you wait longer than 2 minutes, you will get smudges in your finish.
11. 6. Always work in small parts of the car, for example 30 x 50 cm, which you can then polish immediately. The polishing can also be done by a second person, one applies the Ceradur® Metal, the other then polishes the applied coating. After 3 hours, the coating is dry enough to use the coated car again. The car can be washed again after 10 days.

Drying

Dust-free:	approx. 1 hour
Dry:	approx. 6 - 8 hours
Fully cured:	approx. 7 days (chemically resistant)

Packaging

100 mL, 500 mL and 1 L

Consumption

Consumption is 60-70 m2/L



Practical information

- Do not process near open flames or in direct sunlight
- Do not dilute or mix with other products
- Tools can be cleaned with Butylacetate
- A strong ammonia odour is released during the curing of Ceradur® coatings. This smell will go away after 30 minutes.
- For non-metal surfaces Ceradur® AG or Ceradur® Flex can be used.
- Packaging can be under pressure, open the package carefully.

Storage

Can be kept for at least 12 months in original unopened packaging. Store in a cool, frost-free place. Opened packages have a limited shelf life.

Health and safety

Harmful if swallowed. Causes severe burns and eye damage. Highly flammable liquid and vapor. May cause drowsiness or dizziness. Avoid inhalation, skin and eye contact, wear suitable gloves, respirator, protective clothing and safety goggles. If in doubt, always consult the safety data sheet or our R&D department.



Technical support

Mavro is ISO 9001 certified: your guarantee of quality, in terms of products and advice. Our technical consultants and R&D department are always at your service. We are happy to look at your problem or wish with you. Help you with our products or find a solution if it does not yet exist. Call, e-mail or drop by.

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Edition: January 2021
All previous editions become invalid upon this publication

Product code: 58003