

NANO GRAPHENE COATING

THE FUTURE OF SURFACE COATING SCIENCE



ADVANCED MATERIAL TECHNOLOGY

FIRST IN INDUSTRY

ETCHING REDUCTION

The low thermal conductivity of Polydimethylsiloxane (PDMS) and corrosion resistance of reduced Graphene Oxide (rGO) will help to reduce chemical reactions of contaminants aggravated by heat and UV that can otherwise result in etching, water-spotting and staining.

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NANO GRAPHENE COATING

Graphene is said to be a "miracle material" due to an abundance of beneficial properties. While expensive to manufacture, there are alternative forms of it that offers identical performance like reduced graphene oxide (rGO).

The compatibility of rGO and polymer matrixes allows us to offer you a revolutionary product that is Polydimethylsiloxane (PDMS) based with rGO added. Combining the functionality and benefits of both PDMS and rGO unprecedented in the automotive care industry, Artdeshine's Nano Graphene Coating provides you with a reliable and effective surface protection solution.

ENHANCED TENSILE STRENGTH

ENHANCED FLEXIBILITY

ENHANCED DURABILITY

CAPABILITIES



ETCHING REDUCTION



RAPID HEAT DISPERSION



CORROSION RESISTANT



CHEMICAL RESISTANT

Combining the low thermal

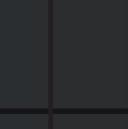


conductivity of PDMS and the ability

cooler surface reduces the effects of

water etching, corrosion and harmful

of rGO to disperse heat quickly, the



REDUCED THERMAL CONDUCTIVITY

With polymer (PDMS) coatings already highly tensile, durable and flexible when absorbing daily wear and tear, the addition of rGO to a polymer matrix creates a composite material and reinforces these properties



5 YEARS BONDING DURABILITY



RAPID WATER DISPERSION



HYDROPHOBIC



SELF CLEANING PROPERTIES



ANTI-FOULING



ENHANCED UV RESISTANCE



EASY CLEANING

CAPABILITIES

chemical reactions.



ABRASION RESISTANT



LOW SURFACE FRICTION

A smooth surface reduces friction, thus lowering the amount of force created by abrasive actions that can otherwise cause fine-lines and scratches. This results in significantly less damage caused during washing and drying.

FINISHING



WET GLOSS



CLEAR REFLECTIVITY



EXTREMELY SLEEK



DARKENS MATTE SURFACES



ENHANCES MATTE SHINE

TECHNICAL INFORMATION

Suitability:

All paint types, matte plastics or trims, chrome, vinyl wraps, PPF

Bonding Durability:

5 years / 350 washes normal conditions

-20°C to +35°C, pH<12

5 years / 180 washes

evxtreme Conditions

-40°C to +40°C, pH>12

Hydrophobic Durability: 2 years

150 washes - pH neutral

80 washes - pH > 12

Chemical Resistance: 13 > pH > 3

Consumption: 3 ml/m2

Coating Thickness: 0,8 – 1.0 µm

Water Repellence:

Contact angle 110-120°

Oil Repellence:

Contact angle 85°

Shelf Life:

2 years un-opened

6 months after opening

Curing Period:

Surface dry 24 hours or 4 hours

heat-assisted (50°C)

Full curing 7 days or

24hrs heat assisted (50°C)