TDS

Protekote GP200

TECHNICAL DATA SHEET

DKS COATINGS

Description

Protekote GP200 is a Graphene Anti-Corrosion Coating in order to reduce dramatically the friction coefficient of many substrate. thanks to its flexible technology, is able to coat a wide range of different substrate: metals, polymer, glass, etc. with a great graphene. The graphene flakes are uniformly attached onto the surface to form a coating of different thickness. it can handle a heavier workload up to 10 N and more depending on the substrate. It is a high efficent graphene anti anti-corrosion coating designed for topcoat of metal and many other substrates protection. With optimized compostion, the antianti-corrsion coating also shows not only outstanding color and gloss retention conditions but also excellent mechnical performance.

TDS

Protekote GP200

TECHNICAL DATA SHEET

DKS COATINGS

FEATURES

High rust resistance

Excellent adhesion

High heat resistance

High UV resistance &
yellowing resistance

High Chemical resistance

High Contamination resistance

Resistant to scratches and impacts

USAGE AREAS

1. On concrete and metal surfaces that require high strength against UV rays and outdoor conditions such as water, sea water, chemicals and corrosion,
2. In all general industries and applications that require protection of all kinds of metal, plastic, wood, glass and mineral surfaces exposed to severe conditions from corrosion, wear and chemical pollution,
3. In places where high levels of external appearance and structural performance must be maintained, such as industrial and commercial steel structures,
4. On exteriors, roofs,
5. On highways,
6. On bridges,
7. In tunnels,
8. At airports,
9. In offshore structures and structures requiring high performance such as warehouse areas
10. It is used on surfaces that require high strength and resistance to heavy conditions.

TDS

Protekote GP200

TECHNICAL DATA SHEET

DKS COATINGS

TECHNICIAL SPECIFICATIONS

Solids (% by weight)	37+2(A+B)
Solids (% by volume)	32 ‡ 2 (A+B)
Density (g/ml)	1.02
Mixing Life - Pot Life (hours)	4-5

*The specified solids, viscosity and density values may vary depending on color.

DRYING TIMES

Touch dry	1-1.5	hour
complete drying	3-4	hour
chemical drying	7	day

*Specified drying times; It is valid under 23 °C ambient temperature and 50% ‡ 2 relative humidity conditions.

SURFACE PREPARATION

Before application, all surfaces to be coated must be clean, dry and free of foreign materials.
Prior to paint application, all surfaces must be assessed and treated in accordance with ISO 8504:2000.
Primed Surfaces should be applied on an anti-corrosive coating system with Finish Rust RP152.
The lining surface must be dry and free from any contamination and
Protekote GP200 must be applied within the specified recoating intervals (see relevant product data sheet).
Broken, damaged, etc. areas must be prepared according to specified standards (ISO 8501-1:2007)
Preparation with Abrasive Scraper or 1 Power Tools
Protekote GP200 should be primed locally before application. Before applying Finish Rust RP151 Metallic Zinc Primed Surfaces Protekote GP200 , make sure that the primer surface is clean, dry and free of all dirt and zinc salts. Make sure that zinc primers are completely cured before applying Protekote GP200 .

TDS

Protekote GP200

TECHNICAL DATA SHEET

DKS COATINGS

APPLICATION

Application Temperature min +5 °C / max + 35 °

Recommended Film Thickness

Wet Film Thickness (micron)	: 70-80 microns
Dry Film Thickness (micron)	: 50-80 microns
Consumption (kg per m2)	: 0.40 - 0.60 kg

Mixing Ratios

Mix 18 parts of Component A, Varnish and 1 part of Component B hardener until a homogeneous mixture is obtained. After mixing, wait 10-15 minutes for pre-reaction before application.

Application Equipment

Brush
• Airmix Spray
Airles Spray
A brush can be used in small areas.
nozzle diameter
1.5-2mm
0.53 - 0.79mm
pressing on the breast
3-4 bars
15 MPa
The spray angle should be 40-80°. Check the cleanliness of the filters before use.

STORAGE AND PACKAGING INFORMATION

Storage conditions
Shelf life
Store in tightly closed packages in a cool place.
1 year

TDS

Protekote GP200

TECHNICAL DATA SHEET

DKS COATINGS

HEALTH AND SAFETY INFORMATION

Take into account the warnings stated in the hazard and precaution statements on the product packaging. The rules written in the product's safety data sheet must be followed. In case of unexpected health problems, consult the nearest health institution.

INFORMATION RELATED TO THE LEGISLATION

Flash point Component A 32°C (90°F); Component B 55°C (131°F); Mixing 35°C (95°F)

SYSTEM COMPATIBILITY

Protekote GP200 can be applied to a limited number of primer and intermediate coat products.

Suitable primers,
DksCoatingscure 1200 DksCoatingszinc 1152 DksCoatingszinc 3151 DksCoatingszinc 5211HS

Suitable interlayers: DksCoatingscure 420 , DksCoatingscure 670HS DksCoatingscure 2001HS DksCoatingsplus 3561

Protekote GP200 should not be applied directly over DksCoatingszinc 5211, which contains low-temperature curing compound.
Maximum overcoating time with Protekote GP200 depends on the primer/undercoat product.

The Protekote GP200 Application Procedure should be reviewed before all applications. Protekote GP200 can only be coated with itself.

TDS

Protekote GP200

TECHNICAL DATA SHEET

DKS COATINGS

PRODUCT FEATURES

The gloss level and surface appearance depend on the application method. Avoid mixing application methods whenever possible. The best results in terms of shine and appearance are achieved with traditional air spray application.
When applying Protekote GP200 by roller or brush, more than one coat may be required to achieve the desired total dry film thickness.

This product should only be thinned using recommended DksCoatingscure thinners. The use of alternative thinners, especially those containing alcohols and ketones, can seriously inhibit the curing mechanism of the coating.

The surface temperature should always be checked before application and should be at least 5°C above the dew point. Ensure adequate ventilation when applying Protekote GP200 in enclosed spaces.

Condensation occurring during or immediately after application may cause a matte appearance and defects in film formation.

After mixing, a slight exothermic heat may occur, which is specific to the product and as a result of the chemical reaction. The stated pot life should never be exceeded, even if the material is still in liquid form and appears usable. It is a good working method to carry out the application with fully loaded and unopened material components. Due to the sensitivity of insufficiently filled curing components to moisture, there is a danger of them reacting with moisture in the air, which can adversely affect the finish performance. This is particularly evident in more temperate climates and/or climates with high humidity, where curing materials dry more quickly and the surface of the container-mixed product may be easier to crust over.

To ensure consistent application of a wet film and a minimum dry film thickness of 70 microns, care should be taken when applying multiple coats of Protekote GP200 by spray. Failure to do so may result in pinpoint porosity, which will negatively affect final appearance and performance.

Protekote GP200 cures satisfactorily where the relative humidity is between 40% and 85%. Curing; It will be slower in low humidity and faster in high humidity.

When recoating after weathering or wear, remove fuel, oil, salt crystals, traffic fumes, etc. before applying a new coat with Protekote GP200. Make sure a thorough cleaning is performed to remove all surface contaminants such as
Early exposure to water causes dark discoloration, especially at low temperatures.