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CORRSHIELD – PE56

Technical Data Sheet

Description

CORRSHIELD – PE56 (Polyester) serie powder coatings are specifically developed for top coat and primer applications, and provides exceptionally good corrosion protection by much more repelling of water compared to conventional powder coatings. For topcoat applications, the unique CORRSHIELD – PE56 technology offers the possibility to significantly reduce and sometimes completely eliminate chemical pre-treatment steps. Through the reduction of pre-treatment chemicals used, less process waste is created and so CORRSHIELD – PE56 can contribute to a significant reduction of the metal coating process impact on the environment.

Formulated as a primer, CORRSHIELD – PE56 can replace epoxy based primer. The performance of CORRSHIELD – PE56 is equal to, or better than, conventional epoxy-based systems, but with a much better environmental footprint.

Characteristics

Corrosion Shield
Repels the water.
Reduces and sometimes completely eliminates chemical pre-treatment steps.
Without chemical pretreatment performs 1-2 mm rust after 504 hours salt spray test on cold rolled steel.
Can replace epoxy base primer
Excellent overall performance
Suitable for wide range of environments
Less waste and pollution to the environment

Applications

For corrosion protection when pre-treatment is not possible or decrease some steps of chemical pre-treatment. Need of less permeability of water through the powder film.

Product Properties

UV Resistance	CORRSHIELD – PE56 serie polyester, for outdoor
Colour	All colours except for clear and transparents
Flow out	Good
Surface	Gloss GL - Semigloss HR - Structure ST - Wrinkle WR
Specific gravity	1.3-1.8 gr/cm3 (low with dark colours, high with light colours)
Shelf Life	12 months (< 30°C and < 50% RH)

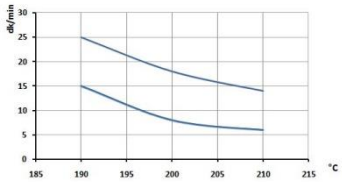
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Application Data

Application: Corona (Can be applied by tribo guns if product code has "T" for the 6th character)
Curing: 200°C 10 minutes

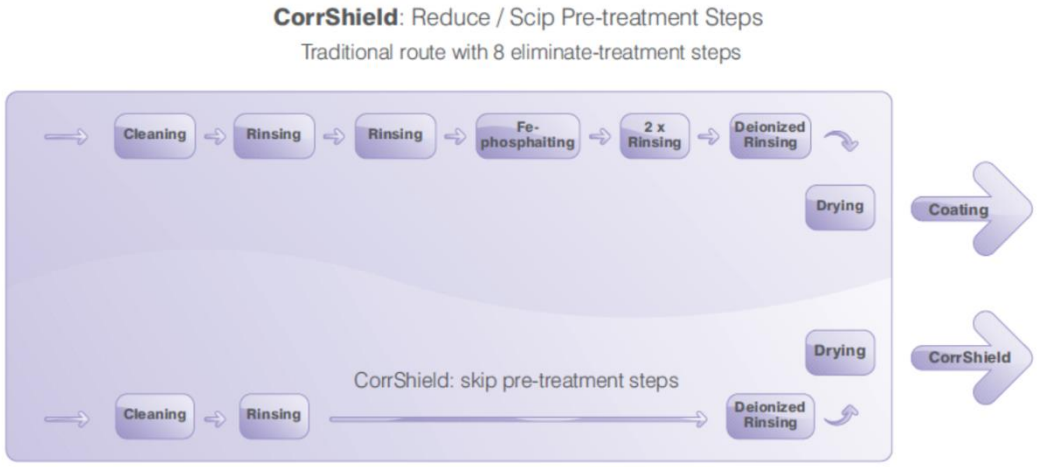
Metal Temperature (°C)	Time (minutes)
190	15-25
200	8-18
210	5-14



Film Thickness: 60-80 µm (recommended)
Theoretical cons. 10-12 m^2/kg. Practical spreading rates will vary due to such factors as method and conditions of application, specific gravity, surface profile and texture.

Application Guide

CORRSHIELD – PE56 powder coatings reduce and sometimes completely eliminate chemical pre-treatment steps. But for a corrosion resistance the substrate must be steel.



Application Procedure and Equipment
CORRSHIELD – PE56 serie powder coatings charging properties are optimized when powder is free-flowing and moisture-free. Aged or compacted powder may require preconditioning for several minutes to fluidise evenly.
If storage room temperature is lower than the application area, powder coatings, which are hygroscopic, should be acclimated in unopened containers prior to adding into the spray hopper. For optimum performance, It should be applied and stored at air-conditioning area. Storage temperatures should be kept below 30 °C.
Powder should not be stored in hoppers for long periods of time. If moisture condensation occurs, fluidize powder to dry-out or replace moisture-laden powder with virgin powder.
Powder coatings are finely ground particulates. Respirators or dust masks should be used by workers exposed to powder in order to avoid dust inhalation.
Compressed air to the gun must be oil and moisture free.
Silicone should not be used in application area.
For box feeders, ensure probe is fully inserted in powder and operated as per manufacturer's recommendations.
Contact points should be maintained to ensure metal-to-metal ground.

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Apply by electrostatic spray. Relative humidity should be 50-60% for corona system, lower than 40% for tribo system.
Cure as per recommendations outlined above.
Reclaim-to-virgin ratios should be carefully monitored to maintain spray consistency.
Sieving powder before adding to hopper eliminates potential clumping or foreign matter.
Test for cure of the coating by impact test.

Care and Maintenance

CORRSHIELD – PE56 should be regularly washed with warm water and mild liquid detergent, followed by a fresh water rinse to maintain the attractive appearance of the powder cured film.
The use of abrasive cleaners is not recommended, nor is the use of active organic solvents.

Health and Safety

The SDS is an integral part of using this product as it contains information on the potential health effect of exposure, personal protective equipment needed. It is recommended to contact to Sales and Customer Service Offices for further information.

Precautions and Limitations

As a result of possible wide application variations and stoving conditions, CORRSHIELD – PE56 may show variation, between İBA Kimya Powder Coatings prepared samples and production applied material. Therefore, it is the applicator and/or their customer's responsibility to ensure the product conforms to their requirements.
For optimum corrosion performance ensures recommended dry film thickness is obtained.
Not recommended for use in highly corrosive environments.

Transport and Storage

Packaging	15-20-25 kgs. Heavy polyethylene bag in a corrugated carton
Shipment	Not dangerous goods. No special transport requirements.
Storage Conditions	Storage temperatures should be kept below 30 C° and 50% relative humidity. Powder should be stored in closed containers.

DISCLAIMER: All the information provided in this data sheet depends on our knowledge and experience up to date and may be subject to revision as new technology and experience evolve. Since the conditions of application may vary depending on the substrate, physical conditions and other variables, users should conduct necessary tests to determine the conformity of the product for its intended use. We do not accept liability since the application, use and processing of the products take place beyond our control and supervision. Moreover, our liability for breach of warranty is exclusively limited to replacement of the product or refund of its price and we are not liable for incidental, indirect or consequential damages under any circumstances.