

TECHNICAL DATA SHEET

P.DS.135 (FB SERIES) REV04/12/2021

SOLVENT BASED

STEELGUARD

Promac Steelguard is a matt liquid galvanised zinc rich coating that provides outstanding corrosion resistance due to cathodic protection. Steelguard has superior welding and adhesive properties and provides protection of the surface in addition to providing an ideal primer for industrial applications and overcoating with industrial grade topcoats.



USES

Liquid galvanised coating ideal for interior and exterior and marine surfaces such as, product limited to:

General surfaces: ship buildings, pot installations, oil rings, cranes, bridges, refineries, chemical plants.
 High temperature surfaces: drying ovens, flues, smokestacks, chimneys.
 In contact with chemicals: linings & coatings for storage containers, pipelines and coolers.

The product is ideal for application and;

- Priming of substrates.
- Prevention of rust and corrosion
- Builds film of the coating system
- Providing an ideal base for over coating
- Providing good opacity and hiding power for coating system
- Preservation of valuable steel including industrial plants / equipment.
- Providing good adhesive and welding properties of the coating system.

FEATURES & BENEFITS

- Ready for use
- High resistance to corrosion
- Excellent adhesion properties
- Based on sacrificial mechanism of corrosion protection more reactive zinc corrosion instead of iron

TECHNICAL DATA

PHYSICAL FORM	Flammable viscous liquid
COLOUR	Grey
FINISH	Smooth, Matt
SPREADING RATE	Approximately 2.5m ² per kg or 0.36m ² per litre
RECOMMENDED WFT	130 – 145 µm per coat.
RECOMMENDED DFT	45 – 50 µm per coat. For effective cathodic protection
POLYMER TYPE	Inorganic Silicate
PIGMENTS	Zinc dust
DRYING PROPERTIES	Surface or touch-dry: within 10 to 30 minutes
%SOLID	80 – 85% by Mass, 33 – 38% by Volume
ZINC CONTENT	77.5% in dry film 90%

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RECOATING TIME	24hours depending on conditions during drying and film build
FLASH POINT	>23°C
PACKAGING	500ml , 1ℓ and 2.5ℓ
THINNING	Not recommended (If required use Mineral Turpentine)
CLEANING	Do not allow the product to dry on equipment. Equipment is readily cleaned using lacquer thinners
APPLICATION METHOD	Supplied ready-for-use using Super fine roller, brush or spray. To be used in a ventilated area. Good mixing with a paddle mixer drill bit until homogenous mass is achieved. The thickness should be adapted according to standard galvanising ASTM-A123

DO NOT PAINT

- IF THE TEMPERATURE IS BELOW 10°C OR ABOVE 35°C
- IF IT IS RAINING OR RAIN IS FORECAST
- IF THE SURFACE IS DAMP (MOISTURE READING ABOVE 15%)
- BEFORE 9H00 AND AFTER 16H00 IN THE WINTER

SURFACE PREPARATION

General:

Ensure surfaces are dry, in sound condition, clean and free from any contaminants.

Poorly adherent materials:

Remove all poorly adhering material such as loose particles and damaged existing paint from the surface. If not effectively removed with the use of high-pressure water cleaning, then remove with the means of mechanical surface preparation methods such as Hand or Power tool or blast cleaning methods.

Rust:

All rust layers must be removed by means of mechanical surface preparation methods such as but not limited to; Hand, Power tool or Blast Cleaning Methods. The loose rust must then be removed by means of surface cleaning methods (water cleaning). Thereafter in areas where rust could not be completely removed, the required application(s) of Promac Rust Converter & Passivator must be applied to the area before the use of Promac Steelguard. In areas where rust has been removed, the surface must be treated with the use of Promac Galv Prep before the use of Promac Steelguard.

NB: Failure to remove all red rusting may result in premature rust penetration through the applied paint system.

Mil Scale:

All mil scale is to be removed by means of mechanical surface preparation methods such as Power tool or Blast Cleaning Methods. Once removed the surface of the metal is to be cleaned with the use of Promac, Galv Prep before the use of Promac Steelguard.

Oils, grease, grime, fungicide, mould & bacteria:

Remove oils, grease, grime, fungicide, mould, bacteria and other contaminants of a similar nature from the surface with the use of Promac, Galv Prep.

Chalky surfaces:

Test the surface for chalky properties with the use of clear tape used for Dust and debris tests, such as the Elcometer 142 dust tape. Apply the tape to the surface and after a short while remove the tape and place the tape on a white piece of paper. Check the tape's cleanliness, if more than 5% of the underside of the tape contains chalky material treat the surface as chalky. Surface preparation methods must be repeated until surface is free from all chalking materials where tests yield equal to or less than 5% chalky material.

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Anchor profile:

All bare metal must achieve an anchor profile of 15 – 25µm before the application of Promac Steelguard. Create the required anchor profile with the use of Blast Cleaning Methods. Thereafter, remove all loose material with the use of water cleaning methods followed by the use of Promac Galv Prep.

Exposed (unpainted) metal surfaces:

Subsequent to carrying out the required surface preparation methods above, all exposed (bare & unpainted) metal substrate surfaces shall be treated with the use of Promac Galv Prep before the use of Promac Steelguard.

Sharp edges, angles, corners:

All sharp edges, angles, corners of substrates are to be rounded and smoothed. During the process of curing these factors tend to cause the coating to bridge over the area resulting in voids, holidays, or thinner thicknesses of the dry film. All edges, angles, corners and gauges are to be prepared by means of Mechanical Surface Preparation Methods such as Hand Tool and/or Power Tool Cleaning Methods. The area must be rounded/smoothed to a point where the edge, angle and/or corner has a minimum radius of 2mm. Thereafter and only subsequent to preparation completion, during the application process of the advised coating system, the area is to receive a Stripe Coat of the specified stripe coat product for the relevant specification, substrate and/or scope of work.

NOTE: All additional products advised for use during surface preparation must be used and applied in accordance to that which is stated within the relevant product's data sheets.

APPLICATION

Subsequent to the surface preparation suggested previously, apply the required application(s) of Steelguard as stated below:

Apply a coat of Promac Steelguard to the required areas at a uniform coverage of 0.36m² / litre or a wet film thickness of 130 – 145 µm per coat by brush, spraying or roller to give a uniform, opaque film. Allow the application to dry for 24 hours. On edges, corners and edges a stripe coat is recommended to be applied with the use of a brush at the suggested coverage and film thickness. Allow for all Promac Steelguard applications to dry for 24 hours before proceeding with application of the subsequent coating within the coating system as described below.

OVERCOATING

Promac Steelguard applications are recommended to be overcoat with industrial grade topcoat products.

HEALTH & SAFETY

The product contains a flammable solvent. Precaution must be taken to prevent naked flames coming in contact with vapours (i.e. smoking must be prohibited). Solvents may also cause narcotic effects if the vapour concentration is too high: always ensure adequate ventilation (do not use solvent based paints in a poorly ventilated or closed space). Avoid contact with skin, eyes, mouth etc. Wear protective clothing, goggles & gloves. If body contact is made, rinse off immediately. Wash product off skin before it has dried using soap and water.

DISCLAIMER ADVICE

The information given in this Product Information Sheet is based on controlled laboratory tests and many years of experience. It is given in good faith, but no guarantee of any performance characteristic is given or implied. Promac Paints cannot be held liable for consequential damage of whatsoever nature that may arise from the use of Promac products. Paint technology is continuously being developed and Promac Paints reserves the right to update product specifications without prior notice. Contact Promac Paints for further details.