

STARFLEX PR/HS 336

PRODUCT DESCRIPTION: High-solids two-component polyamide epoxy primer with anti-corrosion zinc phosphate-based pigments. It has excellent adhesion to carbon steel subjected to abrasive blasting or phosphate conversion.

RECOMMENDED USES: Recommended for coating transformers, radiators, refineries, chemical and petrochemical plants, pulp and paper plants, industrial machinery and equipment. Recommended for environments of low and medium aggressiveness.

CERTIFICATIONS AND APPROVAL: This product, when supplied to comply with the RoHs Directive (Restriction of Certain Hazardous Substances) has the letter R in its description.

PACKAGING:	Component	Content	Package	Unit of measurement
	Component A	3,6 18	3,6 20	L
	Component B	3,6 18	3,6 20	L

CHARACTERISTICS:

Color: Red oxide, and colors (on request)

Gloss: Matte

VOC content: 150 g/l

Volume solid: 78 ± 2% (ISO 3233).

Shelf-Life: 24 months at 25°C.

Thickness per coat (dry): 125 µm –175 µm

Theoretical coverage: 5,2 m²/l without dilution in the thickness of 150 µm dry. Without considering loss factors in application.

Resistance to dry heat: Maximum temperature 120 °C . The product retains its physical and chemical properties up to the temperature of 120 °C however, variations in the coating color and gloss may occur from 60 °C.

Drying:

	16°C	25°C	35°C
Touch:	6 hours	4 hours	2 hours
Handling:	16 hours	12 hours	8 hours
Final:	240 hours	168 hours	120 hours

Overcoating Drying:

	10°C	25°C	35°C
Min	8 hours	6 hours	4 hours
Max	240 hours	168 hours	144 hours

SURFACE PREPARATION The performance of this product depends on the degree of surface preparation.

The surface must be clean, dry and free of any contaminants. Completely remove oils, greases and fats, as described in the SSPC-SP 1 standard.

The accumulated dirt must be removed using a dry brush, clean and dry cloth, compressed air blow, vacuum cleaner and/or with the combination of such items, and the soluble salts must be removed through wash with a great quantity of fresh water, preferably with low pressure (up to 5,000 psi) according to SSPC-SP 12/NACE No. 5.

Surface treatment by the layer conversion process (phosphating)

Execute the layer conversion process, phosphatization using zinc phosphate or tricationic, with mass between 2.0 g/m² and 4.0 g/m². Following the sequential steps: degrease, wash, pickling, wash, refining, phosphate conversion, wash, passivation, wash with deionized water and drying.

NOTE: The surface preparation must be executed according to all the sequential steps relevant to a phosphate conversion process, observing the recommendations of the pre-treatment manufacturer.

Surface treatment through Abrasive Blasting process

Execute the abrasive blasting to near white metal, Sa 2 ½ grade of the ISO 8501-1 visual standard (A Sa 2 ½, B Sa 2 ½, C Sa 2 ½ and D Sa 2 ½) or according to SSPC-SP 10/NACE No. 2, SSPC-VIS 1 visual standard (A SP 10, B SP 10, C SP 10, D SP 10, G1 SP 10, G2 SP 10, G3 SP 10).

Inspect the newly blasted surface observing the presence of surface flaws that could become apparent after this stage, adopting appropriate actions to mitigate such defects through grinding, weld filling and/or epoxy putty.

In case of oxidation on the substrate from the end of the abrasive blasting to the beginning of the coating application, the surface must be blasted again until reaching the specified visual standard.

For areas close to sea air, it is necessary to wash the surface with fresh water at low pressure (minimum 3,000 psi) before the abrasive blasting. And in some cases it is necessary to repeat the washing procedure after the abrasive blasting to remove possible soluble contaminants settled on the surface proceeding with a new abrasive blasting.

Surface treatment by Degreasing with solvents

Completely remove oil from the surface with clean cloths soaked in cleaning solvent according to SSPC SP1. Whenever cleaning a surface with cloths, replace them to avoid saturation. Do not use cotton waste or colored cloths.

For further information, consult WEG Technical Department.

PREPARATION FOR APPLICATION

Mixture

Homogenize the contents of each component with mechanical or pneumatic stirring (A and B). Check there are no sediment settled at the bottom of the package. Add component B to component A, at the recommended proportion (volume), under stirring, until complete homogenization, observing the mixing ratio.

Mixing ratio (Volume)

1 A X 1 B.

Diluent

Diluent sl 30

Gun:

Diluent SL 40

Gun:

Diluent SL 42/SL 30

Flooding:

Diluent SL 42/SL 30

For temperatures lower than 25°C.

For temperatures above 25°C

For temperatures above 25°C

Dilution

Depending on the application method, dilute at most. 10%

Pot life of the mixture (25°C)

6 h

Induction time (25°C)

Wait 10 to 15 minutes before application.

In hot areas, we recommend consulting WEG Technical Department.

APPLICATION FORMS

The data below is a guide, and similar equipment may be used.

Changes in nozzle sizes and pressures may be necessary to improve spraying characteristics. Before application, check if the equipment and its components are clean and in best condition. Purge the compressed air line to prevent contamination of the coating.

After mixing two-component products, if there are stops in the application, and pot life is exceeded (the coating shows variation in fluidity) it can no longer be diluted for further application.

In the spray application, make a 50% overlap in each gun pass, concluding with a cross pass. This technique is used to avoid uncovered and unprotected areas and to obtain a suitable aesthetic finish.

Recoat all sharp edges, cracks and weld beads with a brush to prevent premature failures in these areas.

Conventional gun:

Gun:	JGA 502/3 Devilbiss or equivalent
Fluid nozzle:	EX
Air cap:	704
Atomization pressure:	50 - 70 psi
Pressure in the tank:	10 - 20 psi
Dilution:	10%

Airless Gun:

Use Airless:	Use at least pump 60: 1
Fluid pressure:	2000 – 3000 psi
Hose:	¼" internal diameter
Nozzle:	0,015" - 0,021"
Filter:	Mesh 60
Dilution:	Max. 5%

Flooding:

Application viscosity varies according to the ambient temperature and equipment height.

Brush:

Only recommended for touch up small areas or stripe coat (screws, nuts, weld and sharp edges). Use a brush 75 to 100 mm wide for larger surfaces and 25 to 38 mm for touch up. For application with brush and/or roller, two or more passes may be necessary to obtain a uniform layer according to the recommended film thickness per coat.

Roller:

Use a thin nap, seamless sheepskin or microfiber roller for epoxy coatings.

Cleaning the equipment:

Diluent SI 30
Clean all equipment immediately after use.

NOTE:

Do not leave catalyzed product in contact with the equipment used in the application, because the coating will vary in fluidity at temperatures above specified in the pot life and will cure faster, making the cleaning difficult.

Furthermore, it is a good working practice to periodically wash the spray equipment along the day. The cleaning frequency will depend on the amount sprayed, temperature and elapsed time, including all delays.

PERFORMANCE IN THE APPLICATION

For a good performance of the product, we recommend following the directions below:

In paintings carried out in front of the sea, if exposed to sea air, we recommend to wash with fresh water between coats eliminating settled impurities.

Do not apply the product after the pot life has expired.

We recommend coating only if the surface temperature is at least 3 °C above the dew point temperature.

Variations in color, aspect and gloss (more noticeable in dark colors) may occur, as well as delay in curing and low coating performance, when applied during periods of high air relative humidity, rainy days, low temperatures or drying the coating outdoor.

The temperature of the substrate, the weather and environmental conditions during the application and during the curing of the product, and the thickness of the coat may interfere in the product drying time.

Epoxy systems may have longer curing time when exposed to low temperatures. For temperatures below 10 °C, consult WEG Technical Department.

During the initial cure (first 24 hours), the humidity should not exceed 70%, at the risk of compromising the appearance.

For better application properties, the coating temperature should be between 21 - 27 °C prior to the mixing and application.

It should not be applied in adverse conditions, such as air relative humidity above 70% or on condensed surfaces. Small variations in color, appearance and gloss of the coated parts may occur in periods of high air relative humidity, rainy days, at low temperatures or in situations where the coated parts are placed to dry outdoors.

In coatings with variation in application method in the same job, the final aspect and gloss of the painted

surfaces may show differences.

As this product is a Primer, there may be color variation between batches of this material.
For further information, consult WEG Technical Department.

SAFETY PRECAUTIONS

Product developed for industrial use intended for handling by qualified professionals.

Please read carefully all the information contained in the MSDS of this product, available at:
www.weg.net.

Store in a covered, well-ventilated area. Keep the container tightly closed and away from sources of heat or ignition.

Use only in well-ventilated areas avoiding the accumulation of flammable vapors. Keep the product away from heat and sources of ignition.

Do not inhale mists / vapors / aerosols generated during handling and / or application.

Wear protective gloves / protective clothing / eye protection / face protection.

Avoid release this product and its packaging, as well as materials used during handling and application in the environment.

NOTE:

The information contained in this technical datasheet is based upon the experience and knowledge acquired in the field by the technical team of WEG.

If using the product without previous inquiry to WEG Coating concerning its suitability for the customer's intended purpose, the customer is aware that the use shall be its exclusive responsibility, WEG not being responsible for behavior, safety, suitability or durability of the product.

Some information contained in this datasheet are estimated, and can undergo variances arising from factors outside the manufacturer's control. Thus, WEG does not guarantee and does not assume any responsibility regarding the yield, performance or any other material or personal damage resulting from the incorrect use of the products concerned or the information contained in this Technical datasheet.

The information contained in this technical datasheet is subject to periodic modification, without prior notice, due to the policy of evolution and continuous improvement of our products and services, providing solutions with quality to satisfy our customers' requirements.