TECHNICAL DATA SHEET

W-ESTER HPP 965

PRODUCT DESCRIPTION: Epoxy ester resin-based primer, single-component and air drying. Product with good adhesion and flexibility.

RECOMMENDED USES: Primer widely used to paint machinery and equipment, agricultural and road implements and metal structures.

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
Monocomponent	3,6 20	3,6 20	L

CHARACTERISTICS:

Color:	Ral, Munsell or as per customer standard.
Gloss:	Ultra matte 0 – 15 UB
Volume solid:	49 ± 2% (ISO 3233).
Shelf-Life:	12 months at 25°C. (77°F)
Thickness per coat (dry):	20 µm –30 µm
Theoretical coverage:	19,6 m2/l without dilution in the thickness of 25 µm dry. Without considering loss factors in application.
Resistance to dry heat:	Maximum temperature 60 °C Organic coatings can undergo alterations of color, gloss and adherence when exposed to temperatures exceeding 60 °C

Drying:

	25ºC (77°F)
Touch:	10 minutes
Handling:	3 hours
Final:	72 hours

Overcoating Drying:

	25ºC (77°F)
Min	1 hour
Max	24 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.

Application over primer
NOTE: Observe the product overcoating interval to apply the next coat. In case the maximum overcoating interval has been exceeded, it is necessary to manually/mechanically sand the surface to break the gloss of the previous coat and clean the sanding residues so as to provide better adhesion between the coats.

Treatment of Steel Carbon Surfaces

Hard superficial layers (for example, layers resulting from flame cut) must be removed by grinding it before beginning the abrasive blasting.

All the welds must be inspected e, if necessary, be repaired before the ending of the abrasive blasting. Porosity, cavities, weld splashes, etc. must be repaired by means of proper mechanical treatment or weld repair; in the other areas, round the sharp edges (r ≥ 2 mm, ISO 8501-3).

For further information, consult WEG Technical Department.

PREPARATION FOR APPLICATION

Mixture
Homogenize the contents of the package by means of mechanical or pneumatic agitation. Ensure that no sediment is settled at the bottom of the package.

Diluent
Alkydic diluent 1024

Dilution
Depending on the application method, dilute at most. 15%

Do not dilute with solvents that are not allowed by local legislation and do not exceed the recommended dilution percentage.

The quantity of diluent may vary depending on the type of equipment used and the ambient conditions during the application.

Excessive dilution of the coating may affect the formation and aspect of the film and not allow to reach the specified thickness.

Pot life of the mixture (25°C) (77°F)
Not relevant

APPLICATION FORMS

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

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.

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.

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

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:	15%

Airless Gun:

Use Airless:	Use at least pump 60: 1
Fluid pressure:	1500 - 2500 psi
Hose:	¼" internal diameter
Nozzle:	0,013“ - 0,017“
Dilution:	Max. 5%

Brush:
Not recommended.

Roller:
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.

Cleaning the equipment:
Alkydic diluent 1024

NOTE:
Clean all equipment immediately after use.

Do not leave material in the hoses, spray guns and equipment used in the spraying. Thoroughly wash all equipment used.

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:

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.

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.

It should not be applied in adverse conditions, such as air relative humidity above 85% 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.

We recommend coating only if the surface temperature is at least 3 °C (37,4°F) above the dew point temperature.

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

In coatings with variation in application method in the same job, the final aspect and gloss of the painted surfaces may show differences.

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.

For further information, consult WEG Technical Department.

COMPATIBILITY OF SYSTEMS AND MAINTENANCE REFINISHING

The primer overcoating interval should be respected before applying the topcoat. If the maximum recommended overcoating interval is exceeded, manual/mechanical sanding is necessary to break the gloss. The primer surface must be dry and free of any contaminants.

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.

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