TECHNICAL DATA SHEET

W-CRIL HIDRO ERP 805

PRODUCT DESCRIPTION: Water-soluble fast-drying acrylic resin-based primer.

RECOMMENDED USES: Excellent product to paint materials with irregular surfaces, such as cast iron and blasted carbon steel.

CERTIFICATIONS AND APPROVAL: It complies with Eaton TES standard 006.

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	20	20	L

CHARACTERISTICS:

Color:	Red oxide, Black
Gloss:	Ultra matte 0 – 15 UB
Volume solid:	50 ± 2% (ISO 3233).
pH:	5,5 - 6,5
Shelf-Life:	06 months at 25°C (77°F)
Thickness per coat (dry):	50 µm –90 µm
Theoretical coverage:	6,6 m2/l without dilution in the thickness of 75 µm dry. Without considering loss factors in application.
Resistance to dry heat:	Maximum temperature 60 °C . The product retains its physical and chemical properties up to the temperature of 60 °C . However, above variations in the coating color and gloss may occur.

Drying:

	25ºC (77°F)
Touch:	1 hour
Handling:	1 hour
Final:	168 hours

Overcoating Drying:

	25ºC (77°F)
Min	3 hours
Max	24 hours

Obs The drying is visible to the naked eye, due to its photochromic property.

NOTE:

The product can be accelerated in an oven as per customer requirements. Contact the WEG technical department for further information.

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

The surface must be clean 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 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).

It is recommended a roughness profile between 40 and 60 µm.

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.

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
Water

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.

Water-soluble coatings have a thixotropic characteristic by nature, and caution must be taken in the dilution process.

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

In hot areas, we recommend consulting WEG Technical Department.

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 DevilBiss or equivalent
Fluid nozzle:	FX
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:	0,015“ - 0,021“

Immersion:
Tanks duly prepared for coating application by immersion with continuous stirring. We recommend a tank with recirculation and cascade for homogenization and blister elimination.

The product should be maintained at a pH of 5.5 - 6.5. If there are variations, correct the pH of the product with WEG pH adjusting solution. We recommend the internal cleaning of the tank every 3 months.

Cleaning the equipment:
Water

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.

Water-based coatings are known for their low toxicity, but are vulnerable to environmental contamination, especially by solvents other than water. For a better performance of the product, keep the pH between 5.5 - 6.5. After opening the package, it is recommended to use the whole product.

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.

Increased viscosity of this material may occur during the storage period, being a normal feature of this product.

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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