

WEGTHANE HIDRO HPA 501

PRODUCT DESCRIPTION: Gloss water-soluble two-component aliphatic acrylic polyurethane-based topcoat. Product developed to form a weathering resistant and corrosion protection system.

RECOMMENDED USES: The product promotes a high gloss film where resistance and aesthetics are required. Combining the product with epoxy primer and/or intermediate coating provides a system of great durability. The aliphatic acrylic polyurethane system is widely used in chemical, petrochemical, pulp and paper, sugar and alcohol and transportation industries, among others.

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.

Pre-qualified according to NORSOK M-501, Edition 5, System 1.

PACKAGING:	Component	Content	Package	Unit of measurement
	Component A	2,4	3,6	L
	Component B	1,2	1,5	L

CHARACTERISTICS: Color: Ral, Munsell or as per customer standard.

Gloss: Gloss >80 UB

VOC content: 110 g/l

Volume solid: 36 ± 2% (ISO 3233).

Shelf-Life: 06 months at 25°C

Thickness per coat (dry): 30 µm –40 µm

Theoretical coverage: 10,3 m²/l without dilution in the thickness of 35 µm dry. Without considering loss factors in application.

Resistance to dry heat: Maximum temperature 90 °C . The product retains its physical and chemical properties up to the temperature of 90 °C however, variations in the coating color and gloss may occur from 60 °C.

Drying:

	10°C	25°C	35°C
Touch:	4 hours	1 hour	40 minutes
Handling:	6 hours	3 hours	2 hours
Final:	300 hours	240 hours	168 hours

Overcoating Drying:

	10°C	25°C	35°C
Min	8 hours	5 hours	3 hours
Max	48 hours	48 hours	48 hours

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

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.

Application over primer

The product can be directly applied to a specific primer in order to form a suitable coating system.

Observe the primer overcoating interval before applying the product. If the primer overcoating time is exceeded, sand as described in the primer data sheet. In coatings made on a primer after the overcoating interval, the adhesion values according to ASTM D 4541 may present lower values than those specified by Petrobras standard N 2913.

PREPARATION FOR APPLICATION

For further information, consult WEG Technical Department.

Mixture

Homogenize the content of component A by means of mechanical stirring. Ensure that no sediment is trapped at the bottom of the package. Add component B to component A, in the proportions (volume) indicated, under agitation, until complete homogenization, respecting the mixing ratio.

Mixing ratio (Volume)

2 A X 1 B.

**Diluent
Water**

Dilution

Depending on the application method, dilute at most. 5%

Only add the diluent after complete mixing of components A + B.

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)

2 h

Induction time (25°C)

Wait 7 to 10 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.

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:	60 - 65 psi
Pressure in the tank:	10 - 20 psi
Dilution:	5%

Airless Gun:

Use Airless:	Use at least pump 60: 1
Fluid pressure:	1200 – 2200 psi
Hose:	3/8" internal diameter
Nozzle:	0,015" - 0,021"

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.

Roller:

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

Water

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.

Clean all equipment immediately after use.

PERFORMANCE IN THE APPLICATION

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

Product not recommended for painting the interior of tanks

Light colors may require more than one coat for an even coverage.

Abrupt reduction in gloss may occur if components A and B are not well homogenized.

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.

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.

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

It should not be applied under adverse conditions, such as air relative humidity (RH) above 85%, as changes in color and appearance may occur.

Polyurethane systems (component A and B) present when exposed to air relative humidity, which can cause flaws in the dry film and reduction of pot life. Therefore, we recommend that the packages of each component be properly closed after use and kept in dry places protected from bad weather.

On newly painted surfaces in direct contact with water during the curing process, localized stains may occur with changes in their color (more visible in dark colors), delay in curing and compromised product performance.

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

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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notice, due to the policy of evolution and continuous improvement of our products and services, providing solutions with quality to satisfy our customers' requirements.

