TECHNICAL DATA SHEET

LACKPOXI 76 WET SURFACE N 2680

PRODUCT DESCRIPTION:
High-build polyamine epoxy primer, intermediate coating and topcoat without solvent, formulated with non-toxic anti-corrosion pigments for carbon steel surfaces. Product developed for application on surfaces prepared with abrasive blasting and hydroblasting. This material can be directly applied to wet surfaces.

RECOMMENDED USES:
Ships, offshore and marine structures: ballast and fuel tanks, decks, oil and natural gas platforms, on-board machinery, piping, etc.
Industrial applications: Bridges, metal structures and various machinery.
Piping: It can be applied inside and outside pipes.

CERTIFICATIONS AND APPROVAL:
It complies with Petrobras Standard N 2680.
It complies with the requirements of Anvisa Resolution No. 105 for contact with non-acid aqueous foods, alcoholic foods, fatty foods and dry foods.

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.
Pre-qualified according to NORSOK M-501, Edition 5, System 7.
Meets IMO resolution MSC.215 (82) for painting ballast tanks. DNV certified
Meets System 3B of standard NORSOK M-501, Edition 6.

PACKAGING:

Component	Content	Package	Unit of measurement
Component A	2,7 15	3,6 20	L
Component B	0,9 5	0,9 5	L
Component B II	0,9 5	0,9 5	L
NOTA:	Option of using catalyst (winter component B) for applications in environments at low temperatures environments (below 1		

CHARACTERISTICS:

Color: Primer: Red oxide and Grey., Top Coat: Ral, Munsell or as per customer standard

Gloss: Gloss

Volume solid: SEM SOLVENTE.

Flash Point: > 55 °C

Shelf-Life: 24 months

Thickness per coat (dry): 100 µm –150 µm

Theoretical coverage: 8 m2/l without dilution in the thickness of 150 µm dry. Without considering loss factors in application.
(considering theoretic solids per volume 100%).
To calculate consumption, check the yield to be used in a note in the item Performance in the Application.
In aluminum color (0170), consider the coverage of 5,60 m²/liter on thickness of 150 um.

Drying:

	15°C	20ºC	25ºC	30ºC	40ºC
Touch:	14 hours	9 hours	6 hours	5 hours	4 hours
Handling:	30 hours	20 hours	16 hours	15 hours	12 hours
Final:	10 days	8 days	7 days	7 days	7 days
Pot Life	5 hours	4 hours	3 hours	2 hours	90 minutes

Overcoating Drying:

	15°C	20ºC	25ºC	30ºC	40ºC
Min	20 hours	18 hours	12 hours	12 hours	8 hours
Max	5 days	5 days	5 days	5 days	5 days

Drying: WINTER COMPONENT B

	5ºC	10ºC	15°C	20ºC	25ºC	30ºC	40ºC
Touch:	24 hours	12 hours	8 hours	4 hours	2 hours	90 minutes	45 minutes
Handling:	14 hours	30 hours	14 hours	9 hours	6 hours	5 hours	4 hours
Final:	15 days	12 days	10 days	7 days	7 days	7 days	7 days
Pot Life	3 hours	2 hours	90 minutes	1 hour	40 minutes	30 minutes	15 minutes

Drying winter refinishing

	5ºC	10ºC	15°C	20ºC	25ºC	30ºC	40ºC
Min	48 hours	30 hours	14 hours	8 hours	4 hours	4 hours	3 hours
Max	8 days	7 days	4 days	3 days	3 days	3 days	2 days

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 through the hydroblasting process

NOTE 1: The hydroblasting at extreme high pressure can remove oils and greases from the surface; however, that does not rescind the requirement of the previous degreasing stage.

Note 2: The high or extremely high hydroblasting does not open an anchor pattern (only if the surface has already been subject to some type of abrasive blasting).
Execute hydroblasting (pressure ≥ 10,000 psi) according to SSPC-SP standard 12/NACE No. 5, reaching grade WJ-2 (C WJ-2, D WJ-2, E WJ-2, F WJ-2, G WJ-2 and H WJ-2) of the SSPC-VIS 4/NACE VIS 7 visual standard.

This product can be applied to a surface that has been hydroblasted and presents the grade “moderate flash rust”, WJ-2 M of the SSPC-VIS 4/NACE VIS 7 visual standard.

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 85 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.

The maximum content of soluble impurities on the blasted surface according to the test described in ISO 8502-6 and distilled water must not exceed a measured conductivity according to ISO 8502-9 corresponding to a maximum content of 20 mg/cm² (2 µg/cm2) in immersed or buried areas.

Surface treatment through the manual mechanical cleaning process

Treat the surface mechanically until obtaining at least grade St 3 of the ISO 8501-1 visual standard or according to SSPC-SP 11; the SSPC-VIS 3 visual standard can be used as an aid.

NOTE: If it is not possible to execute the manual mechanical cleaning process, as an alternative the surface can be prepared with commercial abrasive blasting, grade Sa 2 of the ISO 8501-1 visual standard (C Sa 2 and D Sa 2) or according to SSPC-SP 6/NACE No. 3, SSPC-VIS 1 visual standard (C SP 6, D SP 6).

Execute manual mechanical cleaning for carbon steel surfaces that present the oxidation grades C or D, according to the SSPC-VIS 3 visual standard. For surfaces previously painted that present grades E, F or

G according to standard SSPC-VIS 3.

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).

Refinishing of surfaces with aged coating in good conservation conditions

In cases where the aged coating has good adhesion to the substrate, we recommend superficial sanding to break the gloss, followed by the cleaning of the dust and residues of the sanding in order to provide better adhesion between the coats.

We recommend the user of this coating to seek ways to make sure the original aged painting is still well bond to the substrate before executing this refinish. Loose aged coatings or not well bonded must be completely removed. We emphasize that the refinishing must only be made on surfaces in good conservation conditions.

It is acceptable to use less demanding surface preparation standards, provided that the absence of contaminants is guaranteed by cleaning with fresh water at high pressure (between 5,000 psi and 10,000 psi) according to SSPC-SP 12/NACE In. 5. If any further explanation is necessary, contact our technical area to determine alternatives for the proper surface preparation on a case by case basis.

Remove all the existing contaminants on the coating. In case the film has spots not well bonded, remove it with brush off grade 1 or according to SSPC-SP7 standard. ISO 8501-1 visual standard.

Corrosion spots, worn or damaged areas and the like shall be prepared by commercial abrasive blasting to Sa 2 of ISO 8501-1 visual standard or according to SSPC-SP 6 / NACE No. 3, SSPC-VIS 1 visual standard. If it is not possible to execute the abrasive blasting, as an alternative the surface can be prepared with rotary power tools according to SSPC-SP 11.

In order to apply this coating to Inorganic Zinc Silicate Shop Primers still intact and in good conservation conditions, they must be prepared just by cleaning with Nylon brushes or washing with fresh water at low pressure (up to 5,000 psi), according to standard SSPC-SP 12/NACE In. 5.

Maintenance and repair

In cases where the aged coating has good adhesion to the substrate, we recommend superficial sanding to break the gloss, followed by the cleaning of the dust and residues of the sanding in order to provide better adhesion between the coats.

Corrosion spots, worn or damaged areas and the like shall be prepared by commercial abrasive blasting to Sa 2 of ISO 8501-1 visual standard or according to SSPC-SP 6 / NACE No. 3, SSPC-VIS 1 visual standard. If it is not possible to execute the abrasive blasting, as an alternative the surface can be prepared with rotary power tools according to SSPC-SP 11.

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)

3 A **X** 1 B.

Mixing ratio

by volume

Diluent

Not recommended.

Not applicable

Dilution

No dilution required. Product ready for use.

Ready for use

Pot life of the mixture (25°C)
3 h
The pot life is reduced with a higher room temperature.

The pot-life test is performed according to the Brazilian standard ABNT NBR 15742; however, different volumes of coating prepared at once combined with different ambient and coating temperatures will influence the pot life, and different results than those mentioned in this data sheet may be found.

Check the pot life values in the Characteristics field.

Induction time (25°C)
Wait 15 to 20 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.

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.

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.

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

Airless Gun:

Use Airless:	Use at least pump 60: 1
Fluid pressure:	2700 – 3000 psi
Hose:	⅜” internal diameter
Nozzle:	0,017“ - 0,025“

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.
Not recommended for painting the interior of tanks

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:
Not applicable

NOTE:
Clean all equipment immediately after use.

Do not leave catalyzed product in contact with the equipment used in the application, because the coating will vary in fluidity at temperatures above specificated 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:

Epoxy-based products are known by having excellent anti-corrosion properties and low resistance to sunlight exposure. In situations of exposure of the film to the weather, over time it will present a loss of gloss known as chalking and its shade will change as a consequence. Remember that even undergoing such chalking, the film anti-corrosion protection is not impaired.

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.

Regardless of the type of preparation, the tolerance of the product to moisture allows the surface to be

washed with fresh water immediately before painting, ensuring the minimum presence of salt contents.

The product allows the coating over recently hydroblasted surfaces with small traces of flash rust equivalent to the "moderate" grade described in standard SSPC VIS4 (I) / NACE No. 7.

It is not recommended to apply this product over a surface covered with a water film or exposed to rain, neither to expose the freshly painted surface to direct contact with water during the curing process or places with low temperatures or to put the parts to dry outdoors, as staining with changes in color (more noticeable in dark colors), delay in curing and impairment of the product performance may occur.

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

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

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.

NOTE: Dues to the differentiated cure of LACKPOXI 76 WET SURFACE Primer/ top coat N 2680, the calculation of theoretical consumption shall be corrected to 6,13 m²/l in the thickness of 150 micrometers dry. In aluminum paint (0170), the theoretical yield shall be considered to be 5.6m²/liter in the thickness of 150 micrometers dry. These values are based upon tests made in the technical laboratory of WEG. The loss factors arising from conditions and methods of application shall be considered for determining the practical yield for each work.
For further information, consult WEG Technical Department.

COMPATIBILITY OF SYSTEMS AND MAINTENANCE REFINISHING

The product can be directly applied to aged coatings or other coating systems. It is, however, advisable to test the contact of the product with the previous coating in a small test area. We recommend sanding to break the gloss for a better performance of the product. Make sure the original material is well bonded. All loose coating must be removed. Points with corrosion or application over aged coatings should be treated according to technical guidance.

To apply topcoat over the product, the overcoating interval should be observed. The 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.

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.