

WEGPOXI WET SURFACE 88 HT AM

PRODUCT DESCRIPTION

High-build two-component polyamine epoxy primer/finish with anticorrosive pigmentation for steel surfaces. Developed for dry, damp, and hydroblasted surfaces.

RECOMMENDED USE

Industrial applications: internal painting of railcars for loading grains, sugar, and chemical products such as urea and sulfur.

CERTIFICATIONS AND APPROVALS

Meets the requirements of ANVISA Resolution No. 105 for contact with aqueous and alcoholic foods.

When supplied to comply with the ROHS Directive (Restriction of Certain Hazardous Substances), this product includes the letter R in its nomenclature description.

Complies with Ministry of Health Ordinance No. 2914 regarding drinking water.

PACKAGING

Component A	20L Package containing 16L
Component B	4L Package containing 4L

CHARACTERISTICS

Color	White. Gray.
Gloss	Gloss
VOC content	479.21 g/l
Volume Solids	85 ± 2% (ISO 3233)
Flash Point	24 °C
Shelf Life	24 months
Dry Film Thickness	160 µm - 300 µm
Dry Heat Resistance	Maximum temperature 120 °C. The product maintains its chemical properties up to a temperature of 120 °C, but from 60°C, color and gloss variations in the paint may occur.
Theoretical Coverage	3,70 m ² /l without dilution at a dry film thickness of 230 µm. Loss factors during application are not considered.
Note	Minimum Temperature: The product can be applied at temperatures as low as -10°C. However, drying under these conditions will be significantly slower than indicated for the -5°C range specified in the technical bulletin. Humidity and Condensation: The material allows application under high relative humidity and on damp surfaces. Application on surfaces with condensation is permitted only in situations where visual changes of the film (such as flow, color, gloss, and roughness) are acceptable and where immersion service is not required.

DRYING

Drying

	5 °C	15 °C	25 °C	40 °C
Touch	6 hours	4 hours	3 hours	1 hour
Manipulation	14 hours	10 hours	8 hours	5 hours
Final	336 hours	240 hours	168 hours	168 hours
Pot life	3 hours	2 hours	90 min	45 min

Recoat Drying

	5 °C	15 °C	25 °C	40 °C
Minimum	24 hours	18 hours	8 hours	3 hours
Maximum	14 days	10 days	7 days	5 days

SURFACE PREPARATION

Standard Surface Preparation

The performance of this product is related to the degree of surface preparation. In case of doubts, for more information, consult WEG's Technical Department.

The surface must be clean, dry, and free of contaminants. Completely remove oils, greases, and fats according to SSPC-SP1.

Remove accumulated dirt using a dry brush, clean dry cloth, compressed air blow, vacuum, or a combination of these. Remove soluble salts by washing with plenty of fresh water, preferably under low pressure (up to 5,000 psi), according to SSPC-SP12/NACE No. 5 standard.

For applications at subzero temperatures, the surface must be free of any frozen water film or ice.

Recommended Surface Profile

It is recommended a roughness profile between 50 and 75 micrometers.

Abrasive Blasting

Perform abrasive blasting to near-white metal, Sa 2½ grade, according to ISO 8501-1 visual standard (A Sa 2½, B Sa 2½, C Sa 2½, D Sa 2½), or according to SSPC-SP10/NACE No. 2, visual standard SSPC-VIS 1 (A SP10, B SP10, C SP10, D SP10, G1 SP10, G2 SP10, G3 SP10).

Inspect the freshly blasted surface, observing defects that may appear after treatment. Correct them by grinding, filling with welds and/or epoxy putty.

For areas near marine environments, wash with fresh water at low pressure (minimum 3,000 psi) before abrasive blasting. In some cases, repeat washing after blasting to remove soluble contaminants and perform a new abrasive blasting.

If oxidation occurs between the end of abrasive blasting and coating application, the surface must be blasted again until the specified visual standard is achieved.

The maximum soluble contaminant content on the blasted surface must meet ISO 8502-6 and ISO 8502-9 standards, not exceeding 20 mg/cm² (2 ¼g/cm²) in immersed, buried, or submerged areas.

Water Jetting

Application of this product is allowed on hydroblasted surfaces showing moderate flash rust, WJ-2M, according to SSPC-VIS 4/NACE VIS 7 visual standard.

Perform hydroblasting (pressure e 10,000 psi) according to SSPC-SP 12/NACE No. 5, reaching WJ-2 grade (C WJ-2, D WJ-2, E WJ-2, F WJ-2, G WJ-2, and H WJ-2) of SSPC-VIS 4/NACE VIS 7 visual standard.

NOTE 1: Ultra-high-pressure hydroblasting can remove oils and greases from the surface; however, this does not replace prior degreasing.

Hand and Power Tool Cleaning

Perform manual mechanical cleaning for carbon steel surfaces with oxidation grades C or D, according to SSPC-VIS 3 visual standards. For previously painted surfaces with grades E, F, or G, follow SSPC-VIS 3.

If manual mechanical cleaning is not possible, alternatively perform commercial abrasive blasting, Sa 2 grade according to ISO 8501-1 visual standard (C Sa 2 and D Sa 2) or SSPC-SP 6/NACE No. 3, visual standard SSPC-VIS 1 (C SP 6, D SP 6).

Mechanically treat the surface until achieving at least St 3 grade according to ISO 8501-1 visual standard or SSPC-SP 11, using SSPC-VIS 3 visual standard as guidance.

Maintenance and Repair

When the aged coating shows good adhesion, perform light sanding to break gloss, followed by dust and residue cleaning to ensure better adhesion between coats.

Carbon Steel Surfaces

Hard surface layers (e.g., layers resulting from flame cutting) must be removed by grinding before starting abrasive blasting.



All welds must be inspected and, if necessary, repaired before completing abrasive blasting. Porosities, cavities, weld splatter, etc., must be repaired with proper mechanical treatment or welding repair. In other areas, round edges and sharp corners (r e 2 mm, ISO 8501-3).

Aluminum Surfaces

For application on aluminum surfaces, a manual or mechanical treatment should be carried out, with visual standard ST3. Remove all types of dirt, and avoid a "polished" surface without anchor profile.

Over Primer

Respect the product recoat interval. If exceeded, perform light manual/mechanical sanding to break gloss and clean dust/residues for better adhesion between coats.

Over Aged Coating

For aged paint with good adhesion, perform light sanding to break gloss and clean dust/residues, ensuring better adhesion between coats.

It is recommended to test the paint on a small area to check compatibility and ensure aged paint is well adhered. Loose or poorly adhered paints must be removed. Repainting should be done only on well-preserved surfaces.

It is acceptable to adopt less stringent preparation standards as long as contaminant absence is ensured via high-pressure fresh water cleaning (5,000-10,000 psi) according to SSPC-SP12/NACE No.5. In case of doubt, consult the technical area.

Remove all contaminants from the existing paint. Areas where the film is not adhered must be removed with light blasting grade Sa 1 (brush off) or according to SSPC-SP7, ISO 8501-1 visual standard. Corrosion points, worn, or damaged areas must be prepared by commercial abrasive blasting grade Sa 2, ISO 8501-1 standard or SSPC-SP6/NACE No.3, SSPC-VIS 1 standard. If not possible, use rotary-mechanical tools according to SSPC-SP 11.

For intact and well-preserved Inorganic Zinc Silicate Shop Primers, prepare only with a nylon brush or low-pressure fresh water washing (up to 5,000 psi), according to SSPC-SP12/NACE No.5.

For Epoxy Iron Oxide Shop Primers, ensure primer is intact, clean, and dry. If the maximum recoat interval is exceeded, perform manual/mechanical sanding to break gloss and ensure adhesion between layers.

APPLICATION PREPARATION

Mixing	Homogenize the content of each component using mechanical or pneumatic stirring (A and B). Ensure no sediment remains at the bottom of the container. Add component B to component A in the indicated mixing ratio under stirring until completely homogenized, respecting the mixing ratio.
Mixing Ratio	By volume: 4 A x 1 B.
Thinner	EPOXY DILUENT 3005
Dilution	Depending on the application method, dilute to a maximum of 5%.
Notes	Dilute according to recommendation. Only add the thinner after the A + B components are completely mixed. Excessive thinning of the paint may affect film formation, appearance, and make it difficult to achieve the specified thickness. The amount of Diluent may vary depending on the type of equipment used and environmental conditions during application. Only add Diluent after complete mixing of the other components. Do not dilute with solvents not allowed by local legislation, and do not exceed the indicated dilution percentage. Excessive dilution may affect film formation, appearance, and make it difficult to achieve the specified thickness.
Pot Life	1 h 30 min



The shelf life of the mixture is reduced as the ambient temperature increases.

The pot-life test of the mixture is carried out according to ABNT NBR 15742; however, different volumes of paint prepared at once, combined with varying ambient and paint temperatures, will affect the mixture's shelf life, potentially resulting in outcomes different from those stated in this technical bulletin.

Induction Time

No induction time required.

In very hot locations, we recommend consulting WEG's Technical Department.

APPLICATION METHODS

Conventional Spray Gun

Spray gun: JGA 502/3 Devilbiss or equivalent
Fluid nozzle: EX
Air cap: 704
Atomization pressure: 50 - 70 psi
Tank pressure: 10 - 20 psi.

Airless Spray Gun

Airless: Use minimum pump 60:1
Fluid pressure: 2000 - 3000 psi
Hose: 1/4" inner diameter
Nozzle: 0.015" - 0.021".

Roller

Use a short-haired, seamless wool or synthetic roller for epoxy paints.
Recommended only for small areas or touch-ups. Use a low-pile seamless wool roller or synthetic roller for epoxy paints.
For application with brush and/or roller, it may be necessary to apply two or more coats to achieve a uniform layer and the recommended film thickness.

Brush

Recommended only for small area touch-ups or "stripe coat" (screws, nuts, weld beads, sharp corners, and touch-ups).

Cleaning of the equipments:

EPOXY DILUENT 3005

Notes

The data presented serves as a guide and similar equipment may be used.
Changes in pressures and nozzle sizes may be necessary to improve spraying characteristics. Purge the compressed air line to avoid paint contamination.
Do not allow catalyzed product to remain in contact with application equipment, as at temperatures above the indicated "pot life", the paint will show variation in flow and will harden, making cleaning difficult.
Before application, ensure that the equipment and respective components are clean and in optimal condition.
After mixing two-component products, if there are application stops and the pot life has been exceeded (paint shows variation in flow), it can no longer be re-thinned for later application.
In spray application, overlap each gun pass by 50%, finishing with a cross pass. This technique avoids uncovered or unprotected areas and ensures proper aesthetic finish.
Reinforce all sharp corners, gaps, and weld beads with a brush to avoid premature failures in these areas.
Clean all equipment immediately after use.
It is considered good practice to periodically wash the spraying equipment during the day. The cleaning frequency depends on the amount sprayed, temperature, and elapsed time, including all delays.

APPLICATION PERFORMANCE

For coatings applied in coastal areas exposed to sea spray, it is recommended to wash with fresh water between coats to remove deposited impurities.



Light colors may require more than one coat to achieve uniform coverage.

Do not apply the product after the pot life has been exceeded.

For optimal application properties, the paint temperature should be between 21°C and 27°C before mixing and application.

Substrate temperature, climatic and environmental conditions during application and curing, as well as applied film thickness, may affect drying time.

For temperature conditions between 52 and 70°C: the best performance of this product occurs over abrasive blasting to Sa 2 ½ standard or hydroblasting to CWJ-2M standard. However, for equipment in this temperature range that, due to their use, cannot be prepared to the standards mentioned above, application over manual/mechanical treatment to St3 standard according to ISO 8501-1 may be accepted.

The epoxy coating can dry and cure under permanent immersion conditions after application on carbon steel surfaces (2 hours of ambient drying at 25 °C). However, the freshly painted surface, when in direct contact with water during the curing process, may present localized staining with color alteration (more visible in dark colors). Please consult WEG's Technical Department for further information.

It is suggested to maintain forced air circulation in tanks/reservoirs to avoid solvent saturation during curing.

Products for contact with potable water or food: wash with fresh water and neutral soap before operation.

Paintings performed with varying application methods on the same project may result in differences in gloss and final appearance.

Small variations in color, appearance, and gloss (more noticeable in dark colors), as well as delayed curing and performance compromise, may occur during high humidity, rainy days, cold locations, or when parts dry outdoors.

Epoxy-based products are known for their excellent anticorrosive properties and low resistance to sun exposure. When the applied film is exposed to weathering, over time it will lose gloss, a phenomenon known as chalking, which consequently alters its color. It is important to note that, despite this chalking, the film's anticorrosive protection is not compromised.

Relative Humidity: Maximum allowable limit of 85%.

Substrate Temperature: Must be at least 3°C above the dew point to prevent condensation.

COMPATIBILITY

The product may be applied over aged paints or other coating systems; however, it is advisable to test the product's contact with the previous paint on a small test area. We recommend dulling the surface with sanding for better performance; it must be ensured that the original material is well adhered. All non-adhered paint must be removed; areas with corrosion or applications over aged paints must be treated according to technical guidance.

If no topcoat is applied over the product, two coats of this product may be applied at the appropriate thickness.

For topcoat application over the product, the repainting interval must be respected; the surface must be dry and free of contaminants.

SAFETY PRECAUTIONS

Product developed for industrial use intended for handling by qualified professionals. Carefully read all information contained in the SDS of this product, available at: www.weg.net.

Store in a covered and well-ventilated place. 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. Use protective gloves/protective clothing/eye protection/face protection.

Empty containers and materials with paint residues must be disposed of according to current legislation. Take care of the environment.

NOTE

The information contained in this technical bulletin is based on the experience and knowledge acquired in the field by WEG's technical team.

In the event of using the product without prior consultation with WEG regarding its suitability for the purpose for which the customer intends to use it, the customer acknowledges that the use will be at their own exclusive responsibility, and WEG is not liable for the behavior, safety, suitability, or durability of the product.



Some information mentioned in this bulletin is only an estimate and may vary due to factors beyond the manufacturer's control. Therefore, WEG does not guarantee and assumes no responsibility for performance, efficiency, or any material or personal damages resulting from the incorrect use of the products in question or from the information contained in this Technical Bulletin.

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