

W-POXI STP 30

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

Product designed for protection of steel and concrete (under specific primer) in industrial and marine environments, such as vessels, maritime and offshore structures, ballast and fuel tanks, decks, oil exploration platforms, onboard machinery and equipment, piles along their entire length, and structures in permanent immersion in fresh or salt water at port facilities. Industrial applications: pulp and paper, chemical and petrochemical, bridges, roofs, sugar and alcohol mills, agro-industries, food industries, and power plants. Indicated for internal and external pipelines (aerial, immersion, and buried), among others. Can be used on external painting of tanks and other equipment in operation, provided substrate temperature does not exceed 70°C. For this case, use 150 microns of dry film thickness.

CERTIFICATIONS AND APPROVALS

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

PACKAGING

Component A	3.6L Package containing 2.88L
Component B	0.9L Package containing 0.72L

CHARACTERISTICS

Color	Red Oxide.
Gloss	Gloss
VOC content	382.98 g/l
Volume Solids	85 ± 2% (ISO 3233)
Shelf Life	24 months
Dry Film Thickness	100 µm - 200 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	5,67 m ² /l without dilution at a dry film thickness of 150 µm. Loss factors during application are not considered.

DRYING

Drying

	10 °C	25 °C	35 °C
Touch	5 hours	2 hours	1 hour
Manipulation	12 hours	7 hours	4 hours
Final	240 hours	168 hours	144 hours
Pot life	2 hours	90 min	45 min

Recoat Drying

	10 °C	25 °C	35 °C
Minimum	3 hours	1 hour	30 min
Maximum	18 hours	12 hours	10 hours

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.

Recommended Surface Profile

It is recommended a roughness profile between 40 and 70 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).

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.

New Constructions

Remove all existing contaminants from the coating. Non-adhered film spots must be removed with light blasting grade Sa 1 (brush off) or according to SSPC-SP7. Corrosion spots, worn, or damaged areas must be prepared by commercial abrasive blasting grade Sa 2 or according to SSPC-SP6/NACE No.3. Alternatively, rotary mechanical tools can be used according to SSPC-SP11.



It is acceptable to use less stringent surface preparation standards, provided that absence of contaminants is ensured by high-pressure fresh water cleaning (5,000 to 10,000 psi), according to SSPC-SP12/NACE No. 5. In case of doubt, consult WEG technical department.

For application over Iron Oxide Epoxy Shop Primers: ensure the primer is intact, clean, and dry. If the maximum repainting interval is exceeded, perform manual or mechanical sanding to break gloss, ensuring adhesion between layers.

For application over intact, well-maintained Inorganic Zinc Silicate Shop Primers: prepare only with nylon bristle brushes or low-pressure fresh water wash (up to 5,000 psi), according to SSPC-SP12/NACE No. 5.

When aged paint shows good adhesion to the substrate, superficial sanding is recommended to break gloss, followed by dust and residue cleaning to improve intercoat adhesion.

It is recommended to test the paint on a small area to verify compatibility and ensure that the aged original coating is still well adhered to the substrate. Poorly adhered paints must be fully removed. Repainting must be done only on well-preserved surfaces.

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	Ready to use.
Notes	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 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.

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.

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.

The information contained in this technical bulletin is subject to periodic modifications, without prior notice, due to our policy of continuous improvement and evolution of our products and services, providing quality solutions to meet the needs of our customers.