

W-POXI CVS 30

PRODUCT DESCRIPTION

Two-component polyamine epoxy varnish. Sealer providing adhesion on concrete, cement-asbestos, masonry, and wood, reducing excessive or uneven finish absorption on porous substrates.

RECOMMENDED USE

Indicated as a varnish for impregnation and surface sealing, providing an adhesion base for the specific paint system. Commonly used on floors, concrete tanks, walls, structural columns, among others. To make the painted surface smoother and glossier, two to three coats are recommended.

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 2.7L 20L Package containing 15L
Component B	0.9L Package containing 0.9L 5L Package containing 5L

CHARACTERISTICS

Color	Colorless.
Gloss	Gloss
VOC content	655.73 g/l
Volume Solids	33 ± 2% (ISO 3233)
Shelf Life	24 months
Dry Film Thickness	30 µm - 20 µm
Dry Heat Resistance	Maximum temperature 100 °C. The product maintains its chemical properties up to a temperature of 100 °C, but from 60°C, color and gloss variations in the paint may occur.
Theoretical Coverage	13,20 m ² /l without dilution at a dry film thickness of 25 µm. Loss factors during application are not considered.

DRYING

Drying

	10 °C	25 °C	35 °C
Touch	4 hours	2 hours	90 min
Manipulation	8 hours	6 hours	5 hours
Final	216 hours	168 hours	144 hours

Recoat Drying

	10 °C	25 °C	35 °C
Minimum	6 hours	4 hours	3 hours
Maximum	16 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.

Maintenance and Repair

NOTE: Respect the recoating interval for subsequent coat application. If exceeded, perform light manual/mechanical sanding to break the previous coat gloss, followed by dust and residue cleaning to ensure better adhesion between paint layers.



Concrete Surfaces

For more information, consult the Concrete Surface Preparation and Application Manual.

The performance of this product is associated with surface preparation. The surface must be clean, solid, free of any contaminants, fully dry, and have sufficient roughness to allow adhesion of the applied protection system.

No coating or paint should be applied until the concrete (or cement-sand screed) is fully dry and cured for at least 28 days under normal climatic conditions.

No coating or paint should be applied on concrete or cement-sand screed with curing accelerator unless representative tests indicate satisfactory adhesion of the paint system.

Coatings should not be applied over floors contaminated with oils or aggressive products. The floor must be effectively cleaned. Applying over residues of these contaminants may cause coating detachment and other failures.

Concrete execution plans should include prior waterproofing to prevent rising damp or groundwater capillary rise, which may cause blistering or coating delamination.

Check for moisture in concrete according to ASTM D 4263.

Scarification (milling) for moderate system: this method is an excellent option for repairing and restoring damaged surfaces, suitable for both light and heavy work. Recommended for cutting anti-slip grooves, removing contaminated surface layers like grease, oil, rubber, synthetic pavements, paints, traffic marking stripes, among other floor applications. The mill consists of a motor rotating a tool/disc drum with widea (tungsten carbide), which chisels and wears the floor surface. Depth depends on disc type and shape used on the mill shaft.

Manual and rotary hammer grinders: these machines work with motors with 1 or 2 multi-purpose discs (3 stones or diamond inserts per disc). Depending on floor hardness, carborundum or widea (tungsten carbide) inserts can be used.

Captive blast with centrifugal turbines: process with centrifugal blast/turbines, using steel shot in a closed circuit.

Acid treatment: recommended for ground-level floors and walls if no infiltration risk exists, as acid attack on rebar may compromise mechanical strength and structural safety. Follow product technical bulletins or applicator instructions when using this method.

Product application must follow guidance from our technical department to achieve the expected performance. Factors such as surface condition, roughness, contaminant level, and other specifics are essential for proper surface preparation.

Respect the recoat interval between product coats for applying the subsequent coat. If the maximum recoat interval is exceeded, execute a light manual/mechanical sanding to break the gloss of the previous coat, followed by dust and residue cleaning, ensuring better adhesion between paint layers.

Surface preparation must be performed in accordance with SSPC SP-13/NACE No. 6, ICRI Technical Guidance No. 03732, and compared with the visual standard expressed as CSP 1 to 10.

Coating on old concrete only upon recommendation from WEG Technical Department.

Before painting, the concrete must have a maximum residual moisture of 6%.

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 weight: 100 A x 32 B.
Thinner	EPOXY DILUENT 3013
Dilution	Depending on the application method, dilute to a maximum of 15%.
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

6 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

Wait 15 to 20 minutes before application.

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: 1500 - 2500 psi
Hose: 1/4" inner diameter
Nozzle: 0.013" - 0.017".

Roller

Use a short-haired, seamless wool 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 3013

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.

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

During the initial curing (first 24 hours), humidity must not exceed 70%, otherwise the visual appearance may be compromised.

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

Variations in appearance, roughness, and absorption of concrete floors, associated with roller application, may result in higher sealer varnish consumption.

Painting is recommended only if surface temperature is at least 3°C above the dew point.

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

Do not apply under adverse conditions, such as RH above 70% or on condensed surfaces. Small variations in color, appearance, and gloss may occur during high humidity, rainy days, cold locations, or when parts dry outdoors.

To compose an adequate coating system, it is recommended to apply the W-POXI HBA 301 or W-POXI DFA 301 topcoat (other epoxy and polyurethane products are approved; consult WEG Technical Department for further information).

Epoxy systems may have longer curing times when exposed to low temperatures. For curing at temperatures below 10°C, consult the WEG Technical Department.

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.

SYSTEM COMPATIBILITY AND MAINTENANCE REPAINTING

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,

APPLICATION MANUAL

1. GENERAL RECOMMENDATIONS FOR PAINTING:

- 1.1. Environmental conditions, surface cleaning, interval between coats: Comply with all characteristics described in the technical data sheet.
- 1.2. No paint shall be applied if there is an expectation that the ambient temperature may drop to 0°C before the paint has dried.
- 1.3. Paint shall not be applied during rain, fog, or mist, or when the relative humidity exceeds 85% (eighty-five percent), nor when such conditions are expected to occur, as this may compromise intercoat adhesion or total adhesion of the applied film.
- 1.4. Each coat of paint must have a uniform thickness, free from defects such as porosity, wrinkling, blistering, bubbles, craters, or impregnation of other visible contaminants.
- 1.5. Concrete surfaces must receive appropriate treatment to ensure proper performance of the paint system.

2. GENERAL RECOMMENDATIONS FOR FLOORING:

- 2.1. To allow the protective system to be applied, the surface must be clean, solid, free from any type of contaminant, completely dry, and sufficiently rough to ensure adhesion of the protective system to be Applied.
- 2.2. The floor must have a neutral (7) or slightly alkaline (10) pH.
- 2.3. No coating or paint shall be applied on concrete or subfloors containing curing accelerators unless representative tests indicate satisfactory adhesion of the painting system.
- 2.4. No coating or paint shall be applied unless the concrete (or mortar subfloor of cement and sand) is completely dry and cured for at least 28 days under normal climatic conditions.
- 2.5. Coatings shall not be applied on floors contaminated with oils or aggressive products. The floor must be effectively cleaned. If application is performed over contaminant residues, the coating film may detach and exhibit various types of failures and defects.
- 2.6. The concrete design must include prior waterproofing to prevent rising damp or groundwater from ascending through the concrete capillarity, which may cause blistering and peeling of the coating.
- 2.7. Check for moisture presence in concrete according to ASTM D 4263, summarized below:
 - 2.7.1. Attach a plastic sheet measuring 18 x 18 inches (457 mm x 457 mm) using 3M Silver Tape, ensuring all edges are well sealed;
 - 2.7.2. Leave the plastic sheet sealed to the concrete for at least 16 hours;
 - 2.7.3. After this period (between 16-24 hours), remove the plastic sheet and visually inspect both the underside of the sheet and the concrete surface for moisture presence;
 - 2.7.4. Perform one test area sampling per 46 m² or proportional area;
 - 2.7.5. Do not perform painting if any residual moisture is detected on the plastic sheets from the samples.

3. GENERAL RECOMMENDATIONS FOR PAINTING OVER AGED COATINGS:

- 3.1. An analysis must be performed to verify compatibility between the aged coating and the new system to be applied. If incompatible, painting shall not be performed, or all aged coating must be removed. If compatible, sanding (to break gloss and promote adhesion) and surface cleaning shall be performed.
- 3.2. If detachment of the aged coating occurs (even between compatible systems), scraping and/or full removal of the old coating must be performed. Tools such as steel scrapers, scarifiers, and grinders with G-16 - G-24 stones may be used.
- 3.3. After scraping, sanding, or any repair, the surface must be free from contaminants and residues.
- 3.4. Contact the WEG Paints Technical Department to evaluate the need for primer application.

4. PAINT APPLICATION (BASIC RECOMMENDED METHODOLOGY):

- 4.1. Initial Degreasing:
 - 4.1.1. Thoroughly wet the entire surface with clean water, under high pressure and preferably hot;
 - 4.1.2. Evenly spread a biodegradable detergent solution over the entire area, according to the detergent manufacturer's instructions;
 - 4.1.3. Scrub vigorously using industrial scrubbers, grinders, and/or nylon brushes or stiff brooms
 - 4.1.4. Allow the solution to act for approximately 10 minutes;
 - 4.1.5. Rinse thoroughly with clean water, under high pressure and preferably hot, and allow to dry;
 - 4.1.6. Repeat the degreasing process as many times as necessary. Optionally, milling may be performed on localized areas with heavy oil or acid contamination, followed by the degreasing process described above.
- IMPORTANT NOTE: Before beginning application of the painting system described below, the floor must be completely dry and free of moisture. A torch may be used to assist drying, always verifying dryness with the plastic sheet or aluminum foil test (ASTM D 4263). Before painting, concrete moisture content must not exceed 6%.
- 4.1.7. These technical recommendations aim to achieve the best performance of the painting system.
- 4.2. Surface Preparation:
 - 4.2.1. Surface preparation shall comply with Standard SSPC SP-13/NACE No. 6, ICRI Technical Guideline No. 03732, and be compared to the visual standards expressed as CSP 1 to 9:

- CSP 1 - Acid etching
- CSP 2 - Grinding
- CSP 3 - Light shotblast
- CSP 4 - Light scarification
- CSP 5 - Medium shotblast

CSP 6 - Medium scarification
 CSP 7 - Heavy abrasive blast
 CSP 8 - Scabbled (steel or tungsten inserts)
 CSP 9 - Heavy scarification

4.2.2. The type of surface preparation will affect the paint system's thickness and, consequently, the material consumption and performance, as shown in the table below:

VISUAL STANDARD (ICRI TECHNICAL GUIDE)

CSP 1 - Acid etching
 Profile: 13.5 mils $\pm$ 2.5
 Approx.: 342.9 micrometers

CSP 2 - Grinding
 Profile: 16 mils $\pm$ 2.5
 Approx.: 406.4 micrometers

CSP 3 - Light shotblast
 Profile: 19 mils $\pm$ 2.5
 Approx.: 482.6 micrometers

CSP 4 - Light scarification
 Profile: 25 mils $\pm$ 2.5
 Approx.: 635.0 micrometers

CSP 5 - Medium shotblast
 Profile: 33 mils $\pm$ 2.5
 Approx.: 838.2 micrometers

CSP 6 - Medium scarification
 Profile: 63 mils $\pm$ 2.5
 Approx.: 1600.2 micrometers

CSP 7 - Heavy abrasive blast
 Profile: 87.5 mils $\pm$ 5
 Approx.: 2222.5 micrometers

CSP 8 - Scabbled (steel or tungsten inserts)
 Profile: 105 mils $\pm$ 5
 Approx.: 2667.0 micrometers

CSP 9 - Heavy scarification
 Profile: 107 mils $\pm$ 5
 Approx.: 2717.8 micrometers

4.2.3. Scarification (Milling):

4.2.3.1. This method is an excellent option for repairing and restoring damaged surfaces, suitable for both light and heavy work. These machines are recommended for cutting anti-slip grooves, removing contaminated concrete layers such as grease, oil, rubber, synthetic pavements, paints, splashes, traffic markings, and other floor surface applications. The milling machine consists of an electric (three-phase or single-phase) or gasoline motor that rotates a drum fitted with tungsten carbide tools that chip and abrade the surface. The depth of removal depends on the type and shape of the discs used.

4.2.4. Manual and Rotary Hammer Grinders:

4.2.4.1. Grinders are intended for surface preparation, leveling, roughening, cleaning, and polishing of floors and coatings. These machines operate with electric motors (three-phase or single-phase) and one or two multipurpose discs (3 stones or diamond inserts per disc). Depending on floor hardness, carborundum or tungsten carbide inserts may be used.

4.2.5. Captive Shot Blasting with Centrifugal Turbines:

4.2.5.1. Another method of preparing concrete, especially floors, involves centrifugal turbines that project steel shot in a closed circuit. The turbine propels the shot against the concrete while a powerful vacuum removes dust and reclaims the abrasive for reuse. This process removes a few millimeters of concrete.

4.2.6. Acid Treatment: This type of surface treatment requires great care. Acid is only recommended for ground-level floors and walls, provided there is no infiltration risk, as acid attack on reinforcement can compromise structural strength and safety. When opting for this method, follow the steps below:

4.2.6.1. Pre-wet the surface, then apply a 15% hydrochloric acid (muriatic acid) solution in water (1 part commercial muriatic acid to 1 part water by volume). IMPORTANT NOTE: To calculate the required amount of solution, consider that 10 liters of muriatic acid solution covers approximately 15-18 m².

4.2.6.2. Evenly spread the acid solution on the surface using a nylon or stiff brush, avoiding puddles, and allow it to act until the surface roughness resembles 80-grit sandpaper.

4.2.6.3. Rinse thoroughly with plenty of water to remove all acid residue and achieve near-neutral pH.

4.2.6.4. Apply the first coat of primer or coating once the concrete is dry.

5. GENERAL RECOMMENDATIONS FOR PAINTING NEW FLOORS:

- 5.1. Follow all instructions in the technical data sheet described in this document, as well as the recommendations above.
- 5.2. In case of doubts regarding floor performance, do not apply any product and contact the WEG Paints Technical Department.
- 5.3. For surface preparation and application, it is recommended to hire specialized and qualified companies responsible for product application.