

W-POXI DFA 30

PRODUCT DESCRIPTION

High-build two-component polyamine epoxy paint. Low VOC, suitable for indoor environments. High-gloss. Part of flooring systems.

RECOMMENDED USE

The product was developed for painting concrete floors in food industries, hospitals, laboratories, pulp and paper plants, chemical and petrochemical industries, sugar mills, alcohol distilleries, and other industrial floors. This paint should be applied over the W-POXI CVS 301 sealer, W-POXI HSS 301, or another primer recommended by WEG's technical department.

CERTIFICATIONS AND APPROVALS

This product complies with Mexican Official Standard NOM-050-SCFI-2004 and NOM-003-SSA1-2018.

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	White. Colors upon request.
Gloss	Gloss
VOC content	396.76 g/l
VOC content	3.0 (lb/gal). Note: The average of VOC on the line can vary depending on the color.
Volume Solids	88 ± 2% (ISO 3233)
Shelf Life	24 months
Dry Film Thickness	3.9 mils (100 µm) - 5.9 mils (150 µm)
Dry Heat Resistance	Maximum temperature 248 °F (120 °C). The product maintains its chemical properties up to a temperature of 248 °F (120 °C), but from 60°C, color and gloss variations in the paint may occur.
Theoretical Coverage	286.9 ft²/ga (7,04 m²/l) without dilution at a dry film thickness of 4.9 mils (125 µm). Loss factors during application are not considered.

DRYING

Drying

	10 °C	25 °C	35 °C
Manipulation	-	12 hours	-
Light traffic	96 hours	24 hours	18 hours
Heavy traffic	120 hours	96 hours	72 hours

Recoat Drying

	10 °C	25 °C	35 °C
Minimum	24 hours	12 hours	8 hours
Maximum	72 hours	24 hours	24 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.

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.

Respect the recoating interval for applying the subsequent coat. If exceeded, perform light manual or mechanical sanding to break the gloss, followed by cleaning of dust and residues, ensuring better adhesion between coats.

Concrete Surfaces

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.

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 sealer or primer coats for applying the product. If the recoat time is exceeded, sand as described in the sealer or primer technical bulletin.

This product must be applied over a recommended sealer or primer for concrete surfaces to compose an appropriate painting system. For correct application of the sealer/primer, consult its technical bulletin.

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

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.

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 3013
Dilution	Depending on the application method, dilute to a maximum of 5%.
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. In very hot locations, we recommend consulting the WEG Technical Department.
Pot Life	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.
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

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.

During the initial curing (first 24 hours), humidity must not exceed 85%, 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.

Before application, observe weather conditions: there must be no threat of rain or drizzle. Surface temperature must be at least 3°C above the dew point, and relative humidity should not exceed 85%. Adverse conditions may cause color variations and other characteristics. Consult WEG Technical Department.

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.

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.

Product not recommended for internal tank painting.

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.

Under adverse weather conditions in indoor and/or outdoor environments with high relative humidity, rain or drizzle, low or very low temperatures, and excessively high temperatures, variations in color and other product characteristics may occur. Please consult WEG's Technical Department for more information.

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.

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 ± 2.5
 - Approx.: 342.9 micrometers
- CSP 2 - Grinding
 - Profile: 16 mils ± 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.