

WEG TAR FREE HSD 302 HT

PRODUCT DESCRIPTION

Two-component epoxy primer/finish with non-toxic anticorrosive pigmentation, high-build. Product formulated for carbon steel surfaces. Exhibits excellent chemical resistance, corrosion resistance, and good abrasion resistance.

RECOMMENDED USE

Indicated for highly aggressive environments, providing excellent anticorrosive protection on carbon steel. Used on interior and exterior of pipes and water storage tanks, can be applied in high thicknesses in a single coat.

Tintometric system versions are not recommended for use in immersion conditions.

CERTIFICATIONS AND APPROVALS

Complies with AWWA C210-15 standard - Liquid Epoxy Coatings and Linings for Steel Water Pipe and Fittings.

Complies with Sabesp Standard NTS 036.

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

This product complies with Ministry of Health Ordinance GM/MS No. 888, dated May 4, 2021.

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

PACKAGING

Component A	3.6L Package containing 3.6L 20L Package containing 20L
Component B	3.6L Package containing 3.6L 20L Package containing 20L
Component B II	3.6L Package containing 3.6L 20L Package containing 20L
Note	The WEG TAR FREE HSD 302 HT SE catalyst is the most recommended for applications requiring oven curing, as it is an accelerated-drying version.

CHARACTERISTICS

Color	Blue. White. Gray. Black. Red Oxide.
Gloss	Semi-Gloss
VOC content	98.85 g/l
Volume Solids	97 ± 3% (ISO 3233)
Shelf Life	24 months
Dry Film Thickness	400 µm - 1.000 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	without dilution at a dry film thickness of 700 µm. Loss factors during application are not considered.

DRYING

Drying

	10 °C	25 °C	35 °C
Touch	4 hours	2 hours	1 hour
Manipulation	16 hours	6 hours	4 hours
Final	192 hours	168 hours	168 hours

Pot life 60 min 45 min 30 min

Recoat Drying

	10 °C	25 °C	35 °C
Minimum	10 hours	6 hours	3 hours
Maximum	30 hours	24 hours	20 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 50 and 100 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.

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).

The manual mechanical cleaning process is recommended only for small areas.

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.

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.

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: 1 A x 1 B.
Thinner	EPOXY DILUENT 3005
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.
Pot Life	45 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

Airless Spray Gun	Airless: Use minimum pump 60:1 Fluid pressure: 2500 - 3500 psi Hose: 3/8" inner diameter Nozzle: 0.017" - 0.025".
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. Not recommended for internal tank painting. 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 the blue color, shade variations may occur between batches.

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.

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.

Exposure of the coating film to temperatures above 120°C may compromise the product's performance regarding adhesion and chemical resistance.

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

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.

It is not recommended to apply this product on surfaces with a water film, under direct rain impact, on freshly painted surfaces exposed to water during curing, in places with low temperatures, or in situations where parts are applied and left to dry outdoors, as localized staining with color change (more visible in dark colors), curing delay, and compromised product performance may occur.

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.

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.

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