TECHNICAL DATA SHEET

W-NILICA TAR FREE 81

PRODUCT DESCRIPTION

Coal-tar-free vinyl resin-based anticorrosive paint.

RECOMMENDED USE

Indicated for painting new constructions, maintenance, and repairs above and below the waterline. Can be applied as a sealer coat over TBT-based antifouling paints.

PACKAGING

Single Component	0.95 US gal Package containing 0.95 US gal

CHARACTERISTICS

Color	Bronze. Black.
VOC content	5.73 lb/gal
Volume Solids	42 ± 3% (ISO 3233)
Shelf Life	12 months
Dry Film Thickness	2.6 mils - 3.0 mils
Theoretical Coverage	244.5 ft²/gal without dilution at a dry film thickness of 2.8 mils. Loss factors during application are not considered.

DRYING

Drying

	50 °F	77 °F	95 °F
Touch	3 hours	1 hour	40 min
Manipulation	10 hours	6 hours	3 hours
Final	336 hours	168 hours	168 hours

Recoat Drying

	50 °F	77 °F	95 °F
Minimum	10 hours	6 hours	3 hours
Maximum	6 meses	6 meses	6 meses

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 1.57 and 2.36 mils.

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

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be blasted again until the specified visual standard is achieved.

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 0.0787 in, ISO 8501-3).

Over Primer
NOTE: Respect the product#srecoat interval for the application of the subsequent coat. If the maximum indicated recoat interval is exceeded, it is necessary to perform a light manual or mechanical sanding to break the gloss of the previous coat, followed by cleaning off dust and sanding residues to ensure better adhesion between paint coats.

APPLICATION PREPARATION

Mixing	Homogenize the content of the container using mechanical or pneumatic stirring. Ensure no sediment remains at the bottom of the container.
Thinner	ALKYDIC DILUENT 1024
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	Not relevant.

APPLICATION METHODS

Conventional Spray Gun	Spray gun: JGA 502/3 Devilbiss or equivalent Fluid nozzle: EX Air cap: 704 Atomization pressure: 60 - 65 psi Tank pressure: 10 - 20 psi.
Airless Spray Gun	Airless: Use minimum pump 60:1 Fluid pressure: 2000 - 3000 psi Hose: 3/8" inner diameter Nozzle: 0.019" - 0.023".
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:	ALKYDIC DILUENT 1024
Notes	Changes in pressures and nozzle sizes may be necessary to improve spraying characteristics. Purge the compressed air line to avoid paint contamination. Before application, ensure that the equipment and respective components are clean and in optimal condition. 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.

Do not leave material in hoses, guns, or equipment used for spraying. Thoroughly wash all used equipment.

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.

For optimal application properties, the paint temperature must be between 69.8°F - 80.6°F before mixing and application.

Before application, observe weather conditions: there must be no threat of rain or drizzle. Surface temperature must be at least 37,4°F above the dew point, and relative humidity should not exceed 85%. Adverse conditions may cause color variations and other characteristics. Consult WEG Technical Department.

We recommend painting only if the measured surface temperature is at least 5.4°F above the dew point.

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

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.

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.

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