

W-THANE ENG 021

PRODUCT DESCRIPTION: High performance, bicomponent, aliphatic acrylic polyurethane finish primer with anticorrosive pigmentation based on zinc phosphate. It offers good chemical resistance and continuous weathering, excellent adhesion on carbon and galvanized steel, excellent color and gloss retention, high resistance to atmospheric agents, high performance in terms of hardness and impact.

RECOMMENDED USES: Excellent finishing for painting machines and equipment that need resistance to natural weathering.
Also recommended for painting power and communication towers, metallic structures, galvanized parts and equipment.

CERTIFICATIONS AND APPROVAL: This product, when supplied to comply with the RoHs Directive (Restriction of Certain Hazardous Substances) has the letter R in its description.

PACKAGING:	Component	Content	Package	Unit of measurement
	Component A	200	200	L
	Component B	20	20	L

CHARACTERISTICS:

Color: Ral, Munsell or as per customer standard.

Gloss: Gloss

Volume solid: 38 ± 5% (ISO 3233).

Shelf-Life: 12 months at 25 ° C - Component A
06 months at 25 ° C - Component B

Thickness per coat (dry): 40 µm –60 µm

Theoretical coverage: 7,6 m2/l without dilution in the thickness of 50 µm dry. Without considering loss factors in application.

Resistance to dry heat: Maximum temperature 90 °C . The product retains its physical and chemical properties up to the temperature of 90 °C however, variations in the coating color and gloss may occur from 60 °C.

Drying:	10°C			25°C			35°C		
	Touch:	-	30 minutes	-	-	-	-	-	-
Handling:	-	3 hours	-	-	-	-	-	-	-
Final:	-	168 hours	-	-	-	-	-	-	-

Overcoating Drying:	10°C			25°C			35°C		
	Min	-	12 hours	-	-	-	-	-	-
Max	-	48 hours	-	-	-	-	-	-	-

SURFACE PREPARATION The performance of this product is associated with the degree of surface preparation.

The surface must be clean, dry and free of any contaminants. Completely remove oils, greases and fats, as described in the SSPC-SP 1 standard.

Accumulated dirt must be removed using a dry brush and soluble salts must be removed by washing with high pressure fresh water.

Surface treatment through Abrasive Blasting process

We recommend painting on surfaces blasted to Sa 2½ or Sa 3 or according to SSPC SP10 or SSPC SP5. ISO 8501-1 visual standard.

Evaluate the surface after blasting, observing the presence of surface defects revealed after treatment, adopting appropriate practices to minimize defects through grinding or filling.

It is recommended a roughness profile between 40 and 60 μm .

Surface treatment in Hot-Dip Galvanized parts

Initially remove the oiliness from the surface with clean cloths soaked in PU Thinner 5001. Proceed to a "light sanding" with 180 sandpaper, whenever possible to cause scratches in a checkered shape (horizontal and vertical). Clean the surface again with cloths soaked in thinner and change them frequently. In all surface cleaning with cloths, avoid using colored cloths or rags.

Surface Treatment for Non-Ferrous Metals and Electrolytically Galvanized Parts

Initially remove the oiliness from the surface with clean cloths soaked in PU Thinner 5001. Proceed to a "light sanding" with 180 sandpaper, whenever possible to cause scratches in a checkered shape (horizontal and vertical). Clean the surface again with cloths soaked in thinner and change them frequently. In all surface cleaning with cloths, avoid using colored cloths or rags.

Treatment of Steel Carbon Surfaces

The surface must be clean, dry and free from contaminants.

Completely remove oils, greases and grease using a degreasing product or according to the solvent cleaning method SSPC SP1. Wash with fresh water at high pressure.

Maintenance and repair

NOTE: Observe the product overcoating interval to apply the next coat. In case the maximum overcoating interval has been exceeded, it is necessary to manually/mechanically sand the surface to break the gloss of the previous coat and clean the sanding residues so as to provide better adhesion between the coats.

For further information, consult WEG Technical Department.

PREPARATION FOR APPLICATION

Mixture

Homogenize the contents of each component with mechanical or pneumatic stirring (A and B). Check there are no sediment settled at the bottom of the package. Add component B to component A, at the recommended proportion (volume), under stirring, until complete homogenization, observing the mixing ratio.

Mixing ratio (Volume)

3 A X 1 B.

Diluent

Pu diluent 5008

Dilution

Depending on the application method, dilute at most. Dilute if necessary

The quantity of diluent may vary depending on the type of equipment used and the ambient conditions during the application.

Only add the diluent after complete mixing of components A + B.

Do not dilute with solvents that are not allowed by local legislation and do not exceed the recommended dilution percentage.

Excessive dilution of the coating may affect the formation and aspect of the film and not allow to reach the specified thickness.

Pot life of the mixture (25°C)

1 h 30 min

Induction time (25°C)

No induction time required.

In hot areas, we recommend consulting WEG Technical Department.

APPLICATION FORMS

The data below is a guide, and similar equipment may be used.

Changes in nozzle sizes and pressures may be necessary to improve spraying characteristics. Before application, check if the equipment and its components are clean and in best condition. Purge the compressed air line to prevent contamination of the coating.

After mixing two-component products, if there are stops in the application, and pot life is exceeded (the coating shows variation in fluidity) it can no longer be diluted for further application.

Recoat all sharp edges, cracks and weld beads with a brush to prevent premature failures in these areas.

Conventional gun:

Gun:	JGA 502/3 Devilbiss or equivalent
Fluid nozzle:	EX
Air cap:	704
Atomization pressure:	60 - 65 psi
Pressure in the tank:	10 - 20 psi
Dilution:	Dilute if necessary

Brush:

Only recommended for touch up small areas or stripe coat (screws, nuts, weld and sharp edges). Use a brush 75 to 100 mm wide for larger surfaces and 25 to 38 mm for touch up.

Roller:

Not recommended.

NOTE:

Cleaning the equipment:

Pu diluent 5008

For application with brush and/or roller, two or more passes may be necessary to obtain a uniform layer according to the recommended film thickness per coat. Do not leave catalyzed product in contact with the equipment used in the application, because the coating will vary in fluidity at temperatures above specified in the pot life and will cure faster, making the cleaning difficult.

Clean all equipment immediately after use.

PERFORMANCE IN THE APPLICATION

For a good performance of the product, we recommend following the directions below:

In paintings carried out in front of the sea, if exposed to sea air, we recommend to wash with fresh water between coats eliminating settled impurities.

Do not apply the product after the pot life has expired.

We recommend coating only if the surface temperature is at least 3 °C above the dew point temperature.

Variations in color, aspect and gloss (more noticeable in dark colors) may occur, as well as delay in curing and low coating performance, when applied during periods of high air relative humidity, rainy days, low temperatures or drying the coating outdoor.

For better application properties, the coating temperature should be between 21 - 27 °C prior to the mixing and application.

It should not be applied under adverse conditions, such as air relative humidity (RH) above 85%, as changes in color and appearance may occur.

Polyurethane systems (component A and B) present when exposed to air relative humidity, which can cause flaws in the dry film and reduction of pot life. Therefore, we recommend that the packages of each component be properly closed after use and kept in dry places protected from bad weather.

In coatings with variation in application method in the same job, the final aspect and gloss of the painted surfaces may show differences.

For further information, consult WEG Technical Department.

SAFETY PRECAUTIONS

Product developed for industrial use intended for handling by qualified professionals.

Please read carefully all the information contained in the MSDS of this product, available at: www.weg.net.

Store in a covered, well-ventilated area. 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.

Wear protective gloves / protective clothing / eye protection / face protection.

Avoid release this product and its packaging, as well as materials used during handling and application in the environment.

NOTE:

The information contained in this technical datasheet is based upon the experience and knowledge acquired in the field by the technical team of WEG.

Some information contained in this datasheet are estimated, and can undergo variances arising from factors outside the manufacturer's control. Thus, WEG does not guarantee and does not assume any responsibility regarding the yield, performance or any other material or personal damage resulting from the incorrect use of the products concerned or the information contained in this Technical datasheet.

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