TECHNICAL DATA SHEET

W-THANE GND 50

PRODUCT DESCRIPTION: 2-pack aliphatic acrylic polyurethane direct to metal. Developed to be applied directly to galvanized steel. It has good corrosion protection, excellent adhesion and weathering resistance.

RECOMMENDED USES: Recommended for coating electric energy towers and communication towers, metal 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	2,88 16	3,6 20	L
Component B	0,72 4	0,9 4	L

CHARACTERISTICS:

Color: Ral, Munsell or as per customer standard.

Gloss:

Gloss	>80 UB
Semigloss	60 – 80 UB
Semi matte	30 – 60 UB
Matte	15 – 30 UB
Ultra matte	0 – 15 UB

Volume solid: 45 ± 5% (ISO 3233).

Expiry Date: 12 months at 25°C.

Thickness per coat (dry): 30 µm –40 µm

Theoretical coverage: 14,3 m2/l without dilution in the thickness of 35 µm dry. Without considering the loss factors in the 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 ºC.

Drying:

	25ºC
Touch:	1 hour
Handling:	8 hours
Final:	168 hours

Repainting Drying:

	25ºC
Min	5 hours
Max	24 hours

SURFACE PREPARATION The performance of this product is related to 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.

The accumulated dirt must be removed using a dry brush, clean and dry cloth, compressed air blow, vacuum cleaner and/or with the combination of such items, and the soluble salts must be removed through wash with a great quantity of fresh water, preferably with low pressure (up to 5,000 psi) according to SSPC-SP 12/NACE No. 5.

Surface Treatment for Non-Ferrous Metals and Electrolytically Galvanized Parts
Initially remove any dirt and oil from the surface with clean cloths soaked in cleaning solvent according to SSPC SP1. Whenever cleaning a surface with cloths, avoid the use of cotton waste or colored cloths.

Execute a "light sanding" with sandpaper 180 in order to promote roughness. Whenever possible, create criss-cross scratches (horizontal and vertical). Clean the surface again with cloths soaked in solvent and change them frequently.

Application over primer
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 by means of mechanical or pneumatic stirring (A and B). Ensure that no sediment is 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)
4 A **X** 1 B.

Diluent
Pu diluent 5001

Dilution
Depending on the application method, dilute at most 10%

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

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

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

Excessive dilution of the coating may affect the formation of the film and appearance and hinder the attainment of the specified thickness.

Pot life of the mixture (25°C)
4 h
The pot life is reduced with a higher room temperature.

The pot-life test is performed according to the Brazilian standard ABNT NBR 15742; however, different volumes of coating prepared at once combined with different ambient and coating temperatures will influence the pot life, and different results than those mentioned in this data sheet may be found.

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.

In the spray application, make a 50% overlap in each gun pass, concluding with a cross pass. This technique is used to avoid uncovered and unprotected areas and to obtain a suitable aesthetic finish.

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

Changes in nozzle sizes and pressures may be necessary to improve the spraying characteristics.

Before the application, make sure the equipment and its components are clean and in the best condition.

Purge the compressed air line to prevent contamination of the coating.

After mixing the 2-pack products, if there are stops in the application, and the pot life is exceeded (the coating presents variation in its fluidity), it can no longer be diluted for further application.

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

Conventional gun:

Gun:	JGA 502/3 Devilbiss or equivalent
Fluid nozzle:	EX
Air cap:	704
Atomization pressure:	50 - 70 psi
Pressure in the tank:	10 - 20 psi
Dilution:	10%

Brush:
Only recommended for retouching small areas or strip coat (screws, nuts, weld beads, sharp edges and retouching). Use a brush 75 to 100 mm wide for larger surfaces and 25 to 38 mm for retouching.

Roller:
For application with brush and/or roller, application in two or more passes may be necessary to obtain a uniform layer according to the recommended film thickness per coat.

Cleaning the equipment:
Pu diluent 5001

NOTE:

Clean all equipment immediately after use.

Do not leave the catalyzed product in contact with the equipment used in the application, because the coating will present variations in fluidity at temperatures above the specification in the pot life and will harden, making the cleaning difficult.

Furthermore, it is a good working practice to periodically wash the spray equipment along the day. The cleaning frequency will depend on the amount sprayed, temperature and elapsed time, including all delays.

PERFORMANCE IN THE APPLICATION

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

Minor variations in color, appearance and gloss (more noticeable in dark colors) may occur, as well as delay in curing and impairment of surface performance, when applied during periods of high air relative humidity, rainy days, low temperatures or in case the coated parts are put to dry outdoors.

In paintings executed on the seafront, if exposed to the action of sea air, we recommend to wash with fresh water between coats eliminating the settled impurities.

Light colors may require more than one coat for an even coverage.

It should not be applied in adverse conditions, such as air relative humidity above 85% or on condensed surfaces. Small variations in color, appearance and gloss of the coated parts may occur in periods of high air relative humidity, rainy days, at low temperatures or in situations where the coated parts are placed to dry outdoors.

Polyurethane systems (component A and B) present sensitivity 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.

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

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

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

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

The temperature of the substrate, the weather and environmental conditions during the application and during the curing of the product, and the thickness of the applied film may interfere with the product drying time.

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

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 of the 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.

If using the product without prior inquiry to WEG Coating concerning its suitability for the customer's intended purpose, the customer is aware that the use shall be its exclusive responsibility, WEG not being responsible for the behavior, safety, suitability or durability of the product.

Certain information contained in this datasheet is merely an estimate, 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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