

W-THANE GND 501 ALUMÍNIO

PRODUCT DESCRIPTION: Three-component aliphatic acrylic polyurethane direct to metal pigmented with aluminum. 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	3,6	L
	Component B	0,72	0,9	L
	Component C	2,94 kg	3,6	kg

CHARACTERISTICS:				
Color:	Aluminum			
Gloss:	Metallic			
Volume solid:	45 ± 5% (ISO 3233).			
Shelf-Life:	12 months at 25°C.			
Thickness per coat (dry):	30 µm –40 µm			
Theoretical coverage:	12,8 m ² /l without dilution in the thickness of 35 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:	2 hours	1 hour	40 minutes	
Handling:	16 hours	8 hours	6 hours	
Final:	336 hours	168 hours	144 hours	

Overcoating Drying:			
	10°C	25°C	35°C
Min	8 hours	5 hours	4 hours
Max	24 hours	24 hours	24 hours

SURFACE PREPARATION The performance of this product depends on 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.

Fiber Surface Treatment

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.

Treatment of Steel Carbon Surfaces

Hard superficial layers (for example, layers resulting from flame cut) must be removed by grinding it before beginning the abrasive blasting.

All the welds must be inspected e, if necessary, be repaired before the ending of the abrasive blasting. Porosity, cavities, weld splashes, etc. must be repaired by means of proper mechanical treatment or weld repair; in the other areas, round the sharp edges ($r \geq 2$ mm, ISO 8501-3).

For further information, consult WEG Technical Department.

PREPARATION FOR APPLICATION

Mixture

Homogenize the contents of component A by means of mechanical or pneumatic stirring. Ensure that no sediment is settled at the bottom of the package. Slowly add component A to component C. Slowly homogenize by manual or pneumatic stirring until a homogeneous, lump-free mixture is obtained. Only then add component B. Repeat the homogenization process. The mixing ratio recommended for the preparation of the paint should be observed. If necessary, filter using a 60 mesh screen.

Mixing ratio (Volume)

3.5 A X 1 B. X 0.5 C

Diluent

Pu diluent 5001

Dilution

Depending on the application method, dilute at most 10%

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 the complete mixing of components A + B + C.

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)

4 h

In hot areas, we recommend consulting WEG Technical Department.

APPLICATION FORMS

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

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

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 the equipment and its components are clean and in best condition.

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

After mixing 2-pack 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.

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:	10%

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.

Cleaning the equipment:

Pu diluent 5001

NOTE:

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:

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.

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

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

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.

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 coat may interfere in the product drying time.

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, B and C) 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.

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.

If using the product without previous 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 behavior, safety, suitability or durability of the product.

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.

The information contained in this technical datasheet is subject to periodic modification, without prior notice, due to the policy of evolution and continuous improvement of our products and services, providing solutions with quality to satisfy our customers' requirements.

