*TECHNICAL DATA SHEET*

# W-THANE SQA 501

**PRODUCT DESCRIPTION:**

Gloss high-solids two-component aliphatic acrylic polyurethane topcoat with excellent coverage. Product developed to compose an anti-corrosion protection system with high sealing power, chemical and weathering resistance.

**RECOMMENDED USES:**

The product promotes a high gloss film where resistance and aesthetics are required. Combining the product with epoxy primer and/or intermediate coating provides a system of great durability. The aliphatic acrylic polyurethane system is widely used in chemical, petrochemical, pulp and paper, sugar and alcohol and transportation industries, among others.

This Product can be applied with substrate temperature up to 70°C. For this condition, use the specific primer W-TERM HPD 364.

**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 | 16,65<br>3 | 20<br>3,6 | L |
| Component B | 3,35<br>0,6 | 3,6<br>0,9 | L |

**CHARACTERISTICS:**

**Color:** Ral, Munsell or as per customer standard.

**Gloss:** Gloss >80 UB

**Volume solid:** 65 ± 2% (ISO 3233).

**Shelf-Life:** 24 months at 25°C.

**Thickness per coat (dry):** 60 µm –70 µm

**Theoretical coverage:** 10 m2/l without dilution in the thickness of 65 µm dry. Without considering loss factors in application.

**Resistance to dry heat:** Maximum temperature 70 °C . The product retains its physical and chemical properties up to the temperature of 70 °C however, variations in the coating color and gloss may occur from 60 ºC.

**Drying:**

| | 10ºC | 25ºC | 35ºC |
|---|---|---|---|
| **Touch:** | 7 hours | 4 hours | 3 hours |
| **Tackiness:** | 12 hours | 8 hours | 5 hours |
| **Final:** | 300 hours | 240 hours | 168 hours |

**Overcoating Drying:**

| | 10ºC | 25ºC | 35ºC |
|---|---|---|---|
| Min | 12 hours | 8 hours | 5 hours |
| Max | 48 hours | 48 hours | 48 hours |

**SURFACE PREPARATION**

The performance of this product depends on the degree of surface preparation.

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.

**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.

The product can be directly applied to a specific primer in order to form a suitable coating system.

**For further information, consult WEG Technical Department.**

## PREPARATION FOR APPLICATION

**Mixture**

Homogenize the contents of component A by means of manual, mechanical or pneumatic stirring. Add component A to component B gradually. Slowly homogenize by manual or pneumatic stirring until a homogeneous, lump free mixture is obtained. The mixing ratio indicated for the preparation of the paint should be respected. If necessary, filter in a screen mesh 60.

**Mixing ratio (Volume)**

5 A X 1 B.

**Diluent**
**Pu diluent 5007**

**Dilution**
Depending on the application method, dilute at most. 15%

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)**
2 h

In hot areas, we recommend consulting WEG Technical Department.

## APPLICATION FORMS

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

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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: | 15% |

**Airless Gun:**

| | |
|---|---|
| Use Airless: | Use at least pump 60: 1 |
| Fluid pressure: | 1200 – 2200 psi |
| Hose: | ⅜” internal diameter |
| Nozzle: | 0,015“ - 0,021“ |
| Dilution: | Max. 5% |

**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:**
Use a thin nap, seamless sheepskin or microfiber roller for epoxy coatings.
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.

**Cleaning the equipment:**
Pu diluent 5007

**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 specificated 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:

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

Product not recommended for painting the interior of tanks

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.

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 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.

For further information, consult WEG Technical Department.

**COMPATIBILITY OF SYSTEMS AND MAINTENANCE REFINISHING**

The direct application of this product on zinc-rich ethyl silicate-based primers, alkyd primers, coal tar-based coatings and other single-component primers is not recommended. When necessary to apply the topcoat over one of the primers mentioned above, we recommend the application of an appropriate intermediate coating.

In situations where the nature of the primer is unknown, it is recommended to test the compatibility of the product in a small area. Check the original material is well adhered. All loose coating must be removed. Points with corrosion or application over aged coatings should be treated according to technical guidance.

The primer overcoating interval should be respected before applying the topcoat. If the maximum recommended overcoating interval is exceeded, manual/mechanical sanding is necessary to break the gloss. The primer surface must be dry and free of any contaminants.

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 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.

The information provided in this document is based on our tests and experiences and is intended to inform you about the product and its possibilities of application.
The information provided in this data sheet is not intended to be complete, and the user shall take the risk in case of using the product for another purpose than the specifications recommended in this data sheet without first obtaining our written confirmation as to its suitability for the intended purpose. While we strive to ensure the accuracy of the information provided in this document, we cannot control the quality or condition of the substrate as well as all other factors that affect the use and application of this coating. Therefore, unless we agree in writing with any divergent conditions from our recommendations, we shall not take any liabilities that may arise from the performance of this product. The information contained in this data sheet is subject to change without prior notice, based on our experience and policy of continuous development.

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.