

W-THANE APA 50 PROTECTION

PRODUCT DESCRIPTION

High-solids aliphatic acrylic polyurethane gloss varnish. Virucidal product, tested and approved.

RECOMMENDED USE

Recommended for painting medical and dental equipment, food processing equipment, air conditioning units, steel furniture and kitchens, household appliances and utensils, veterinary equipment, sanitary metals, door locks, stair handrails, and others.

CERTIFICATIONS AND APPROVALS

Virucidal property of the W-THANE APA 501 line certified through a laboratory test at NB-2 (Biosafety Level 2) following ANVISA Recommendations Art. 1 and Art. 3 of IN 04/13 and IN 12/16 and methodologies described in standards: INTERNATIONAL STANDARD ISO- BS ISO 21702:2019 (First edition 2019-05-27): #Measurement of antiviral activity on plastics and other non-porous surfaces# and Robert Koch Institute - RKI, complying with Good Laboratory Practices (GLP).

When supplied to comply with the ROHS Directive (Restriction of Certain Hazardous Substances), this product includes the letter R in its nomenclature description.

PACKAGING

Component A	0.9L Package containing 0.68L 3.6L Package containing 2.7L
Component B	0.9L Package containing 0.9L 0.25L Package containing 0.225L.

CHARACTERISTICS

Color	Colorless.
Gloss	Gloss
VOC content	460.08 g/l
Volume Solids	61 ± 2% (ISO 3233)
Shelf Life	24 months
Dry Film Thickness	2.4 mils (60 µm) - 2.8 mils (70 µm)
Dry Heat Resistance	Maximum temperature 194 °F (90 °C). The product maintains its chemical properties up to a temperature of 194 °F (90 °C), but from 60°C, color and gloss variations in the paint may occur.
Theoretical Coverage	382.2 ft²/ga (9,38 m²/l) without dilution at a dry film thickness of 2.6 mils (65 µm). Loss factors during application are not considered.

DRYING

Drying

	10 °C	25 °C	35 °C
Touch	7 hours	4 hours	3 hours
Manipulation	12 hours	8 hours	5 hours
Final	300 hours	168 hours	168 hours

Recoat Drying

	10 °C	25 °C	35 °C
Minimum	10 hours	8 hours	5 hours
Maximum	48 hours	48 hours	48 hours

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.

Maintenance and Repair

NOTE: Respect the recoating interval for subsequent coat application. If exceeded, perform light manual/mechanical sanding to break the previous coat gloss, followed by dust and residue cleaning to ensure better adhesion between paint layers.

APPLICATION PREPARATION

Mixing	Homogenize the content of each component using mechanical or pneumatic stirring (A and B). Ensure no sediment remains at the bottom of the container. Add component B to component A in the indicated mixing ratio under stirring until completely homogenized, respecting the mixing ratio.
Mixing Ratio	By volume: 3 A x 1 B.
Thinner	PU DILUENT 5003
Alternative Thinners	PU 5003 Diluent - Recommended for temperatures below 25 °C. PU 5007 Diluent - Recommended for temperatures above 35 °C and baking cure. PU 5004 Diluent - Recommended for temperatures between 25°C and 35°C.
Dilution	Depending on the application method, dilute to a maximum of 15%.
Notes	Dilute according to recommendation. Only add the thinner after the A + B components are completely mixed. Excessive thinning of the paint may affect film formation, appearance, and make it difficult to achieve the specified thickness. 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	2 h The shelf life of the mixture is reduced as the ambient temperature increases. The pot-life test of the mixture is carried out according to ABNT NBR 15742; however, different volumes of paint prepared at once, combined with varying ambient and paint temperatures, will affect the mixture's shelf life, potentially resulting in outcomes different from those stated in this technical bulletin.
Induction Time	No induction time required. In very hot locations, we recommend consulting WEG's Technical Department.

APPLICATION METHODS

Conventional Spray Gun	Spray gun: JGA 502 Devilbiss or equivalent Fluid nozzle: EX Air cap: 704 Atomization pressure: 50 - 70 psi Tank pressure: 10 - 20 psi.
Airless Spray Gun	Airless: Use minimum pump 60:1 Fluid pressure: 1500 - 2500 psi Hose: 3/8" inner diameter



Nozzle: 0.015" - 0.021".

Brush

Recommended only for small area touch-ups or "stripe coat" (screws, nuts, weld beads, sharp corners, and touch-ups).

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.

Use a brush 75 to 100 mm wide for larger surfaces and 25 to 38 mm for touch-ups.

Cleaning of the equipments:

PU DILUENT 5003

Notes

The data presented serves as a guide and similar equipment may be used.

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.

After mixing two-component products, if there are application stops and the pot life has been exceeded (paint shows variation in flow), it can no longer be re-thinned for later application.

Reinforce all sharp corners, gaps, and weld beads with a brush to avoid premature failures in these areas.

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.

Do not apply the product after the pot life has been exceeded.

For optimal application properties, the paint temperature should be between 21°C and 27°C before mixing and application.

Painting is recommended only if surface temperature is at least 3°C above the dew point.

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

Polyurethane systems (components A and B) are sensitive to relative humidity, which may cause defects in the dry film and reduction in pot life. After use, keep containers closed and protected.

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.

SYSTEM COMPATIBILITY AND MAINTENANCE REPAINTING

The primer repainting interval must be respected for the application of the topcoat. If the maximum interval indicated is exceeded, manual/mechanical sanding with sandpaper to remove gloss is necessary. The primer surface must be dry and free of contaminants.

In situations where the nature of the primer is unknown, it is recommended to test the product's compatibility on a small area; it must be ensured that the original material is well adhered. All non-adhered paint must be removed; areas with corrosion or applications over aged paints must be treated according to technical guidance.

Direct application of the product over zinc-rich primers based on ethyl silicate, alkyd primers, coal tar-based paints, and other single-component primers is not recommended. When topcoat application over any of the above primers is required, we recommend applying a suitable intermediate product.

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.

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