

W-THANE FRA 50

PRODUCT DESCRIPTION

High-solids, two-component glossy aliphatic acrylic polyurethane topcoat. Features flame-retardant properties, slowing down flame propagation and providing protection for structures and people along escape routes.

RECOMMENDED USE

The product forms a high-gloss film and, combined with its flame-retardant property, allows a wide range of applications on products that may come into direct flame or radiant heat sources, such as metal structures, fire doors, electrical panels, and other metal items used in public, residential, and industrial environments where resistance and aesthetics are required. Combined with epoxy primers and/or intermediates, it provides a highly durable system.

CERTIFICATIONS AND APPROVALS

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	3.6L Package containing 3L 20L Package containing 16.65L
Component B	0.9L Package containing 0.6L 3.6L Package containing 3.35L

CHARACTERISTICS

Color	White. Gray.
Gloss	Gloss
Volume Solids	62 ± 2% (ISO 3233)
Dry Film Thickness	60 µm - 70 µm
Dry Heat Resistance	Maximum temperature 90 °C. The product maintains its chemical properties up to a temperature of 90 °C, but from 60°C, color and gloss variations in the paint may occur.
Theoretical Coverage	9,54 m ² /l without dilution at a dry film thickness of 65 µm. Loss factors during application are not considered.

DRYING

Drying

	10 °C	25 °C	35 °C
Touch	7 hours	4 hours	3 hours
Stickiness	12 hours	8 hours	5 hours
Final	300 hours	240 hours	168 hours

Recoat Drying

	10 °C	25 °C	35 °C
Minimum	12 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.

Remove accumulated dirt using a dry brush, clean dry cloth, compressed air blow, vacuum, or a combination of these. Remove soluble salts by washing with plenty of fresh water, preferably under low pressure (up to 5,000 psi), according to SSPC-SP12/NACE No. 5 standard.

Over Primer

Respect the primer recoat interval before applying the product. If exceeded, perform sanding

according to the technical bulletin. Painting over primer with exceeded interval may have adhesion lower than specified by Petrobras N2913 and ASTM D4541.

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: 5 A x 1 B.
Thinner	PU DILUENT 5003
Alternative Thinners	PU 5004 Diluent - Recommended for temperatures above 30 °C.
Dilution	Depending on the application method, dilute to a maximum of 15%.
Notes	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.

APPLICATION METHODS

Conventional Spray Gun	Spray gun: JGA 502/3 Devilbiss or equivalent Fluid nozzle: EX Air cap: 704 Atomization pressure: 60 - 65 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".
Roller	Use wool or synthetic rollers.
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.
Cleaning of the equipments:	PU DILUENT 5003
Notes	Changes in pressures and nozzle sizes may be necessary to improve spraying characteristics. Purge the compressed air line to avoid paint contamination. Do not allow catalyzed product to remain in contact with application equipment, as at temperatures above the indicated "pot life", the paint will show variation in flow and will harden, making cleaning difficult. 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.

Clean all equipment immediately after use.

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.

Light colors may require more than one coat to achieve uniform coverage.

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.

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

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.

Product not recommended for internal tank painting.

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.

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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