

W-THANE ERD 53



PRODUCT DESCRIPTION

Conventional smooth aliphatic polyurethane finish, two-component. Good natural weathering resistance and excellent adhesion.

RECOMMENDED USE

Excellent finish for painting machinery, equipment, and metal structures exposed to natural weathering.

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 2.7L 20L Package containing 15L
Component B	0.9L Package containing 0.9L 5L Package containing 5L

CHARACTERISTICS

Color	According to customer standard. RAL and Munsell chart.
Gloss	Gloss (>80 UB) W-THANE ERD 531 Semi-gloss (60 - 80 UB) W-THANE ERD 532 Semi-matte (30 - 60 UB) W-THANE ERD 533 Matte (15 - 30 UB) W-THANE ERD 534 Ultra-matte (0 - 15 UB) W-THANE ERD 535
VOC content	398.90 g/l
Volume Solids	38 ± 5% (ISO 3233)
Shelf Life	12 months
Dry Film Thickness	30 µm - 50 µm
Dry Heat Resistance	Maximum temperature 100 °C. The product maintains its chemical properties up to a temperature of 100 °C, but from 60°C, color and gloss variations in the paint may occur.
Theoretical Coverage	9,50 m ² /l without dilution at a dry film thickness of 40 µm. Loss factors during application are not considered.

DRYING

25 °C

Touch Dry:	1 h
Handle Dry:	5 h
Full Cure:	7 days
Minimum recoat drying time:	5 h
Maximum recoat drying time:	24 h

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.



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.

Degreasing

Completely remove oils and greases by applying a degreasing product or according to the solvent cleaning method. Whenever cleaning surfaces with cloths, replace them to avoid saturation. Do not use cotton waste or colored cloths.

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.

Carbon Steel Surfaces

Hard surface layers (e.g., layers resulting from flame cutting) must be removed by grinding before starting abrasive blasting.

All welds must be inspected and, if necessary, repaired before completing abrasive blasting. Porosities, cavities, weld splatter, etc., must be repaired with proper mechanical treatment or welding repair. In other areas, round edges and sharp corners (r e 2 mm, ISO 8501-3).

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 5001
Dilution	Depending on the application method, dilute to a maximum of 25%.
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	6 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 Devilbiss or equivalent Fluid nozzle: FX 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: 1/4" inner diameter Nozzle: 0.013" - 0.017".
Brush	Recommended only for small area touch-ups or "stripe coat" (screws, nuts, weld beads, sharp corners, and touch-ups).



Cleaning of the equipments:

PU DILUENT 5001

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.

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.

In spray application, overlap each gun pass by 50%, finishing with a cross pass. This technique avoids uncovered or unprotected areas and ensures proper aesthetic finish.

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

Clean all equipment immediately after use.

It is considered good practice to periodically wash the spraying equipment during the day. The cleaning frequency depends on the amount sprayed, temperature, and elapsed time, including all delays.

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.

Before application, observe weather conditions: there must be no threat of rain or drizzle. Surface temperature must be at least 3°C above the dew point, and relative humidity should not exceed 85%. Adverse conditions may cause color variations and other characteristics. Consult WEG Technical Department.

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.

Epoxy-based products are well known for their excellent corrosion-resistant properties, although they have limited resistance to sunlight. When the applied coating is exposed to weathering, it may gradually lose its gloss, a phenomenon known as chalking, which can also cause a slight change in color. It is important to note that this chalking does not compromise the coating's corrosion protection.

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.

Polyurethane systems (components A and B) are sensitive when exposed to ambient relative humidity, which may cause defects in the dry film and reduce pot life. Therefore, we recommend that the packaging of each component, after use, be properly sealed and stored in dry places protected from weather conditions.

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.
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