



W-THANE ENG 053

**PRODUCT DESCRIPTION**

High-performance two-component aliphatic acrylic polyurethane primer/finish with zinc phosphate-based anticorrosive pigmentation. Good chemical and continuous weathering resistance, excellent adhesion on carbon steel and galvanized steel, excellent color and gloss retention, high resistance to atmospheric agents, high hardness and impact performance.

**RECOMMENDED USE**

Recommended for painting power transmission towers and communication towers, metal structures, galvanized parts, and equipment.

Excellent finish for painting agricultural and road implements, machinery, parts, and equipment requiring natural weathering resistance.

**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**

<b>Component A</b>	0.95 US gal Package containing 0.95 US gal 5.28 US gal Package containing 4.40 US gal
<b>Component B</b>	0.24 US gal Package containing 0.16 US gal 1.06 US gal Package containing 0.88 US gal

**CHARACTERISTICS**

<b>Color</b>	According to customer standard. RAL and Munsell chart.
<b>Gloss</b>	Semi-Gloss
<b>VOC content</b>	4.88 lb/gal
<b>Volume Solids</b>	52 ± 5% (ISO 3233)
<b>Shelf Life</b>	12 months
<b>Dry Film Thickness</b>	1.2 mils - 1.6 mils
<b>Dry Heat Resistance</b>	Maximum temperature 194 °F. The product maintains its chemical properties up to a temperature of 194 °F, but from 140°F, color and gloss variations in the paint may occur.
<b>Theoretical Coverage</b>	605.5 ft <sup>2</sup> /gal without dilution at a dry film thickness of 1.4 mils. Loss factors during application are not considered.

**DRYING**

	<b>77 °F</b>
<b>Touch Dry:</b>	3 min
<b>Handle Dry:</b>	8 h
<b>Full Cure:</b>	7 days
<b>Minimum recoat drying time:</b>	12 h
<b>Maximum recoat drying time:</b>	2 days

**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.

**Recommended Surface Profile**

It is recommended a roughness profile between 1.57 and 2.36 mils.

**Abrasive Blasting**

Perform abrasive blasting to near-white metal, Sa 2½ grade, according to ISO 8501-1 visual standard (A Sa 2½, B Sa 2½, C Sa 2½, D Sa 2½), or according to SSPC-SP10/NACE No. 2, visual standard SSPC-VIS 1 (A SP10, B SP10, C SP10, D SP10, G1 SP10, G2 SP10, G3 SP10).

Inspect the freshly blasted surface, observing defects that may appear after treatment. Correct them by grinding, filling with welds and/or epoxy putty.

**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**

Completely remove surface oils with clean cloths soaked in cleaning Diluent according to SSPC SP1. Replace cloths during cleaning to avoid saturation. Do not use rags or colored cloths.

**Non-Ferrous and Electro-Galvanized Surfaces**

Remove all dirt and grease from the surface using clean cloths soaked in Cleaning Solvent according to SSPC SP1. Avoid using rags or colored cloths during cleaning.

Perform a "light sanding" using 180-grit sandpaper to promote roughness. Whenever possible, make cross-hatch scratches (horizontal and vertical). Clean the surface again with cloths soaked in solvent, changing them frequently.

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**APPLICATION PREPARATION**

<b>Mixing</b>	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.
<b>Mixing Ratio</b>	By volume: 5 A x 1 B.
<b>Thinner</b>	PU DILUENT 5008
<b>Dilution</b>	Depending on the application method, dilute to a maximum of 20%.
<b>Notes</b>	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.
<b>Pot Life</b>	4 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.

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**APPLICATION METHODS**

<b>Conventional Spray Gun</b>	Spray gun: JGA 502/3 Devilbiss or equivalent Fluid nozzle: EX Air cap: 704 Atomization pressure: 60 - 65 psi Tank pressure: 10 - 20 psi.
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<b>Roller</b>	<p>Use a short-haired, seamless wool or synthetic roller for epoxy paints.</p> <p>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.</p>
<b>Brush</b>	<p>Recommended only for small area touch-ups or "stripe coat" (screws, nuts, weld beads, sharp corners, and touch-ups).</p>
<b>Cleaning of the equipments:</b>	<p>PU DILUENT 5008</p>
<b>Notes</b>	<p>The data presented serves as a guide and similar equipment may be used.</p> <p>Changes in pressures and nozzle sizes may be necessary to improve spraying characteristics. Purge the compressed air line to avoid paint contamination.</p> <p>Before application, ensure that the equipment and respective components are clean and in optimal condition.</p> <p>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.</p> <p>Reinforce all sharp corners, gaps, and weld beads with a brush to avoid premature failures in these areas.</p>

**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 must be between 69.8°F - 80.6°F before mixing and application.

We recommend painting only if the measured surface temperature is at least 5.4°F 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.

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](http://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.

The information contained in this technical bulletin is subject to periodic modifications, without prior notice, due to our policy of continuous improvement and evolution of our products and services, providing quality solutions to meet the needs of our customers.

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