

W-THANE HIDRO PDV 51

PRODUCT DESCRIPTION

Two-component waterborne aliphatic acrylic polyurethane varnish. Excellent natural weathering resistance and high durability. Can be applied in thick coats, forming a waterproof barrier. Waterborne, safe for indoor application without area restriction.

RECOMMENDED USE

Recommended for internal and external applications on masonry, concrete blocks, or asbestos cement, indicated for painting floors and walls in industrial, residential, and commercial segments, providing a decorative coating with low odor and excellent performance. Can be applied as an "easy to clean" or anti-graffiti varnish on walls and facades, directly on concrete or over acrylic paints and artistic coatings.

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	0.95 US gal Package containing 0.75 US gal
Component B	0.24 US gal Package containing 0.20 US gal

CHARACTERISTICS

Color	Colorless.
Gloss	Semi-gloss (60 - 80 UB) W-THANE HIDRO PDV 512 Matte (15 - 30 UB) W-THANE HIDRO PDV 514
Volume Solids	32 ± 2% (ISO 3233)
Shelf Life	6 months
Dry Film Thickness	2.4 mils - 3.9 mils
Dry Heat Resistance	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.
Theoretical Coverage	163.0 ft ² /gal without dilution at a dry film thickness of 3.1 mils. Loss factors during application are not considered.

DRYING

Drying			
	50 °F	77 °F	95 °F
Heavy traffic	16 hours	12 hours	10 hours
Final	300 hours	240 hours	168 hours
Recoat Drying			
	50 °F	77 °F	95 °F
Minimum	16 hours	5 hours	3 hours
Maximum	48 hours	24 hours	24 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.

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.

Concrete Surfaces

Before painting, all masonry or concrete must be cured (28 days for cement mortar or concrete) and dry, without cracks, fissures, or voids, and perfectly adhered to the base or other mortar and coating



layers.

Mold release agents, cement laitance, grease, oil, wax, or any other contaminants that have penetrated or deposited on the surface must be removed, along with all accumulated dust.

For concrete applications, it is recommended to first apply a sealer coat diluted 5% by volume with potable water. For old concrete, a technical inspection is advised. For more information, consult the Concrete Surface Preparation and Application Manual.

Apply two coats of W-THANE HIDRO PDV 51 CLEAR, respecting the recoat interval, or a single coat over a substrate already painted.

W-THANE HIDRO PDV 51 varnish can be applied over aged latex, acrylic, epoxy, or polyurethane paints, previously cleaned and free of coating film fractures or adhesion loss signs. If adhesion is lacking, remove all paint. If the primer type is unknown, test W-THANE HIDRO PDV 51 compatibility on a small area.

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: 3.8 A x 1 B.
Thinner	WATER
Dilution	Depending on the application method, dilute to a maximum of 5%.
Notes	Water-based paints are naturally thixotropic, requiring caution during the dilution process. 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

Roller	Use wool or synthetic rollers.
Brush	Use a brush 3.0 to 3.94 inches wide for larger surfaces and 0.98 to 1.5 inches for touch-ups.
Cleaning of the equipments:	WATER
Notes	The data presented serves as a guide and similar equipment may be used. 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. For brush application, depending on the geometry of the part, it may be necessary to apply two or more coats in order to obtain a uniform layer and in accordance with the



recommended dry film thickness.
Clean all equipment immediately after use.

APPLICATION PERFORMANCE

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 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.

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.

When applying by brush or roller, two or more coats may be necessary to achieve a uniform layer and recommended film thickness.

Paintings performed with varying application methods on the same project may result in differences in gloss and final appearance.

On freshly painted surfaces in direct contact with water during the curing process, localized staining with color change (more visible in darker colors), curing delay, and compromised product performance may occur.

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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