TECHNICAL DATA SHEET

W-THANE CVD HS 501 PIA

PRODUCT DESCRIPTION

High-performance two-component aliphatic acrylic polyurethane primer/finish. Good chemical and continuous weathering resistance, excellent adhesion to carbon steel, color and gloss retention, high resistance to atmospheric agents and some solvents, high performance in hardness, impact, and abrasion.

RECOMMENDED USE

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

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	RAL, Munsell, or according to the customer's standard.
Gloss	Glossy >80 GU W-THANE CVD HS 501 PIA Semi-Gloss 60-80 GU W-THANE CVD HS 502 PIA Semi-Matte 30-60 GU W-THANE CVD HS 503 PIA Matte 15-30 GU W-THANE CVD HS 504 PIA Ultra-Matte 0-15 GU W-THANE CVD HS 505 PIA
Volume Solids	55 ± 3% (ISO 3233)
Shelf Life	12 months
Dry Film Thickness	45 µm - 55 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	10,00 m2/l without dilution at a dry film thickness of 55 µm. Loss factors during application are not considered.

DRYING

Drying

	10 °C	25 °C	35 °C
Touch	50 min	30 min	25 min
Manipulation	7 hours	4 hours	4 hours
Final	240 hours	168 hours	152 hours

Recoat Drying

	10 °C	25 °C	35 °C
Minimum	16 hours	12 hours	8 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.

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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.

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	FT DILUENT 1025 SLOW
Dilution	Depending on the application method, dilute to a maximum of 20%.
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. Only add the diluent after completely mixing components A and B.
Pot Life	3 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 502/3 Devilbiss or equivalent Fluid nozzle: EX Air cap: 704 Atomization pressure: 60 - 65 psi Tank pressure: 10 - 20 psi.
Airless Spray Gun	Airless: not recommended.
Roller	Not recommended.
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:	FT DILUENT 1025 SLOW

Notes	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. Reinforce all sharp corners, gaps, and weld beads with a brush to avoid premature failures in these areas. Clean all equipment immediately after use. Do not leave material in hoses, guns, or equipment used for spraying. Thoroughly wash all used equipment.

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.

When RH is below 50%, use Ethyl Silicate 9002 Diluent and spray fresh water two hours after application. For proper curing, periodic fresh water spraying may be required.

Do not apply under adverse conditions, such as RH above 85%, as gloss and color may slightly change. Do not apply on condensed surfaces.

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.

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.

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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