

HERESITE PU SRD 50

PRODUCT DESCRIPTION

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

RECOMMENDED USE

Excellent finish for painting machinery and equipment requiring resistance to natural weathering. Also recommended for painting electrical towers and communication towers, metal structures, parts, and galvanized equipment.

CERTIFICATIONS AND APPROVALS

This product complies with Mexican Official Standard NOM-050-SCFI-2004 and NOM-003-SSA1-2018.

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 gallon package containing 0.83 US gallon.

CHARACTERISTICS

Color	According to customer standard. RAL and Munsell chart.
Gloss	Gloss (>80 UB) HERESITE PU SRD 501 Semi-gloss (60 - 80 UB) HERESITE PU SRD 502 Semi-matte (30 - 60 UB) HERESITE PU SRD 503 Matte (15 - 30 UB) HERESITE PU SRD 504 Ultra-matte (0 - 15 UB) HERESITE PU SRD 505
Volume Solids	46 ± 5% (ISO 3233)
Flash Point	24 °C
Shelf Life	24 months
Dry Film Thickness	2.0 mils - 3.5 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	267.7 ft ² /gal without dilution at a dry film thickness of 2.8 mils. Loss factors during application are not considered.

DRYING

Drying			
	50 °F	77 °F	95 °F
Touch	2 hours	30 min	25 min
Manipulation	16 hours	8 hours	6 hours
Final	192 hours	168 hours	168 hours
Recoat Drying			
	50 °F	77 °F	95 °F
Minimum	18 hours	12 hours	10 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.

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.

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.

For areas near marine environments, wash with fresh water at low pressure (minimum 3,000 psi) before abrasive blasting. In some cases, repeat washing after blasting to remove soluble contaminants and perform a new abrasive blasting.

If oxidation occurs between the end of abrasive blasting and coating application, the surface must be blasted again until the specified visual standard is achieved.

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 0.0787 in, ISO 8501-3).

Hot-Dip Galvanized Surfaces

Wash the substrate with running water to remove soluble salts resulting from the galvanizing process prior to abrasive blasting. Use a non-woven abrasive pad made of synthetic fibers bonded with resin impregnated with abrasive mineral.

It is recommended to apply the coating over surfaces blasted to Sa 1 (brush-off) according to ISO 8501-1 or SSPC-SP7 standards, using 20-40 mesh steel grit, ensuring the operation only produces a surface roughness between 0.4 and 1.0 mils and a uniform matte appearance (visual standard ISO 8501-1).

For light abrasive blasting (brush-off), hot-dip galvanized carbon steel plates should have a minimum thickness of 1/8 inch and a zinc coating of at least 2.4 mils.

For small areas, it is acceptable to first remove surface oil and grease with clean cloths soaked in Cleaning Thinner in accordance with SSPC-SP1.

Perform a "light sanding" using 100-grit sandpaper, preferably creating cross-hatch (horizontal and vertical) scratches. Clean the surface again with thinner-soaked cloths, changing them frequently. When cleaning with cloths, avoid using rags or colored fabrics.

Note: Hot-dip galvanized carbon steel intended for painting should not undergo passivation to avoid coating defects or failures.

Over Primer

Respect the product recoat interval. If exceeded, perform light manual/mechanical sanding to break gloss and clean dust/residues for better adhesion between coats.

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 5008
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	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.
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: 50 - 70 psi Tank pressure: 10 - 20 psi.
Roller	Not recommended.
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 5008

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

Before application, observe weather conditions: there must be no threat of rain or drizzle. Surface temperature must be at least 37,4°F above the dew point, and relative humidity should not exceed 85%. Adverse conditions may cause color variations and other characteristics. Consult WEG Technical Department.

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.

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.

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.

Under adverse weather conditions in indoor and/or outdoor environments with high relative humidity, rain or drizzle, low or very low temperatures, and excessively high temperatures, variations in color and other product characteristics may occur. Please consult WEG's Technical Department for more information.

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.
