

**W-POLI HBA 45**

**PRODUCT DESCRIPTION**

Polyaspartic resin varnish. High solids, excellent color and gloss retention, extra-fast drying.

**RECOMMENDED USE**

The product provides a high-gloss, chemically resistant finish, widely used for painting equipment in aggressive industrial environments where both durability and aesthetics are required. Recommended for chemical, petrochemical, pulp and paper, sugar and ethanol, transportation industries, among others.

**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>	3.6L Package containing 2.4L 20L Package containing 13.3L
<b>Component B</b>	1.5L Package containing 1.2L 3.6L Package containing 3.35L

**CHARACTERISTICS**

<b>Color</b>	According to customer standard. RAL and Munsell chart.
<b>Gloss</b>	Gloss
<b>Volume Solids</b>	98 ± 2% (ISO 3233)
<b>Shelf Life</b>	12 months
<b>Dry Film Thickness</b>	150 µm - 300 µm
<b>Dry Heat Resistance</b>	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.
<b>Theoretical Coverage</b>	4,36 m <sup>2</sup> /l without dilution at a dry film thickness of 225 µm. Loss factors during application are not considered.

**DRYING**

<b>Drying</b>			
	<b>10 °C</b>	<b>25 °C</b>	<b>35 °C</b>
<b>Touch</b>	3 hours	1 hour	30 min
<b>Manipulation</b>	5 hours	2 hours	1 hour
<b>Final</b>	168 hours	168 hours	168 hours
<b>Recoat Drying</b>			
	<b>20 °C</b>	<b>25 °C</b>	<b>35 °C</b>
<b>Minimum</b>	3 hours	1 hour	1 hour
<b>Maximum</b>	120 hours	120 hours	120 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.



Mechanically treat worn, damaged, or compromised areas until reaching at least St 3 (or SSPC-SP3), according to the visual standard ISO 8501-1.  
 Areas that cannot be prepared by this method must undergo localized abrasive blasting, achieving Sa 2½ (or SSPC-SP6), according to the visual standard ISO 8501-1.

**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.

**Over Aged Coating**

It is recommended to test the paint on a small area to check compatibility and ensure aged paint is well adhered. Loose or poorly adhered paints must be removed. Repainting should be done only on well-preserved surfaces.

**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: 2 A x 1 B.
<b>Thinner</b>	PU DILUENT 5003
<b>Alternative Thinners</b>	PU 5003 Diluent - Recommended for temperatures below 25 °C. PU 5007 Diluent - Recommended for temperatures above 35 °C and baking cure. PU 5004 Diluent - Recommended for temperatures between 25°C and 35°C.
<b>Dilution</b>	Depending on the application method, dilute to a maximum of 15%.
<b>Notes</b>	Dilute according to recommendation.  Only add the thinner after the A + B components are completely mixed.  Excessive thinning of the paint may affect film formation, appearance, and make it difficult to achieve the specified thickness. 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>	30 min  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.
<b>Induction Time</b>	No induction time required.  In very hot locations, we recommend consulting WEG's Technical Department.

**APPLICATION METHODS**

<b>Conventional Spray Gun</b>	Spray gun: JGA 502/3 Devilbiss or equivalent Fluid nozzle: EX
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	<p>Air cap: 704                  Atomization pressure: 60 - 65 psi                  Tank pressure: 10 - 20 psi.</p>
<b>Airless Spray Gun</b>	<p>Airless: Use minimum pump 60:1                  Fluid pressure: 1200 - 2200 psi                  Hose: 3/8" inner diameter                  Nozzle: 0.015" - 0.021".</p>
<b>Roller</b>	<p>Consult the WEG Technical Department for further information.</p>
<b>Brush</b>	<p>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.</p>
<b>Cleaning of the equipments:</b>	<p>PU DILUENT 5003</p>
<b>Notes</b>	<p>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.                  Reinforce all sharp corners, gaps, and weld beads with a brush to avoid premature failures in these areas.                  Clean all equipment immediately after use.</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 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.

Polyaspartic 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, it is recommended that the containers be properly closed and kept in dry places protected from weathering.

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.

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](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.

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**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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