



## W-POLI HSA 455

**PRODUCT DESCRIPTION:** Polyaspartic resin-based topcoat. High-solids product, excellent color and gloss retention and super fast drying.

**RECOMMENDED USES:** The product provides a high gloss and chemically resistant film, widely used to paint equipment in aggressive industrial environments, requiring resistance and aesthetics. Combining the product with epoxy primer and/or intermediate coating provides a system of great durability. The aliphatic acrylic polyurethane system is widely used in chemical, petrochemical, pulp and paper, sugar and alcohol and transportation industries, among others.

**CERTIFICATIONS AND APPROVAL:** This product, when supplied to comply with the RoHs Directive (Restriction of Certain Hazardous Substances) has the letter R in its description.

PACKAGING:	Component	Content	Package	Unit of measurement
	Component A	23,52 kg	20	L
	Component B	4,52 kg	4	L

CHARACTERISTICS:	Color:			
		Ral, Munsell or as per customer standard.		
<b>Gloss:</b>	Gloss >80 UB			
<b>VOC content:</b>	290 g/l			
<b>Volume solid:</b>	66 ± 2% (ISO 3233).			
<b>Shelf-Life:</b>	24 months at 25°C.			
<b>Thickness per coat (dry):</b>	80 µm –120 µm			
<b>Theoretical coverage:</b>	5,89 m <sup>2</sup> /l without dilution in the thickness of 80 µm dry. Without considering loss factors in application.			
<b>Resistance to dry heat:</b>	Maximum temperature 90 °C . The product retains its physical and chemical properties up to the temperature of 90 °C however, variations in the coating color and gloss may occur from 60 °C.			
<b>Drying:</b>				
		<b>10°C</b>	<b>25°C</b>	<b>35°C</b>
<b>Touch:</b>	30 minutes	25 minutes	20 minutes	
<b>Handling:</b>	80 minutes	60 minutes	50 minutes	
<b>Final:</b>	216 hours	168 hours	144 hours	
<b>Overcoating Drying:</b>				
		<b>20°C</b>	<b>25°C</b>	<b>35°C</b>
Min	80 minutes	60 minutes	50 minutes	
Max	-	-	-	

**SURFACE PREPARATION** The performance of this product depends on the degree of surface preparation.

The accumulated dirt must be removed using a dry brush, clean and dry cloth, compressed air blow, vacuum cleaner and/or with the combination of such items, and the soluble salts must be removed through wash with a great quantity of fresh water, preferably with low pressure (up to 5,000 psi) according to SSPC-SP 12/NACE No. 5.

### Surface treatment through the hydroblasting process

We recommend to paint on surfaces hydroblasted to the degree CWJ-2 according to standard SSPC-VIS 4. Allowed application on degree of flash rust light according to CWJ-2L.

## Surface treatment through Abrasive Blasting process

It is recommended a roughness profile between 60 and 85 µm.

In case of oxidation on the substrate from the end of the abrasive blasting to the beginning of the coating application, the surface must be blasted again until reaching the specified visual standard.

Inspect the newly blasted surface observing the presence of surface flaws that could become apparent after this stage, adopting appropriate actions to mitigate such defects through grinding, weld filling and/or epoxy putty.

Execute the abrasive blasting to near white metal, Sa 2 ½ grade of the ISO 8501-1 visual standard (A Sa 2 ½, B Sa 2 ½, C Sa 2 ½ and D Sa 2 ½) or according to SSPC-SP 10/NACE No. 2, SSPC-VIS 1 visual standard (A SP 10, B SP 10, C SP 10, D SP 10, G1 SP 10, G2 SP 10, G3 SP 10).

**For further information, consult WEG Technical Department.**

### PREPARATION FOR APPLICATION

#### Mixture

Homogenize the contents of component A by means of mechanical or pneumatic stirring. Ensure that no sediment is settled at the bottom of the package. Slowly add component A to component C. Slowly homogenize by manual or pneumatic stirring until a homogeneous, lump-free mixture is obtained. Only then add component B. Repeat the homogenization process. The mixing ratio recommended for the preparation of the paint should be observed. If necessary, filter using a 60 mesh screen.

#### Mixing ratio (Volume)

4 A X 1 B.

#### Diluent

**Pu diluent 5003**  
**PU Diluent 5007**

Para temperaturas por debajo de 20°C  
For temperatures above 20°C.

#### Dilution

Depending on the application method, dilute at most. 5%

Only add the diluent after complete mixing of components A + B.

Do not dilute with solvents that are not allowed by local legislation and do not exceed the recommended dilution percentage.

Excessive dilution of the coating may affect the formation and aspect of the film and not allow to reach the specified thickness.

#### Pot life of the mixture (25°C)

1 h

#### Pot life of the mixture / Exothermic peak at 25°C

Time (min)	Temperatures (°C)
7 min	30 °C
15 min	31 °C
30 min	35 °C
45 min	33 °C
55 min	34 °C

### APPLICATION FORMS

**The data below is a guide, and similar equipment may be used.**

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Changes in nozzle sizes and pressures may be necessary to improve spraying characteristics. Before application, check if the equipment and its components are clean and in best condition. Purge the compressed air line to prevent contamination of the coating.

After mixing two-component products, if there are stops in the application, and pot life is exceeded (the coating shows variation in fluidity) it can no longer be diluted for further application.

Recoat all sharp edges, cracks and weld beads with a brush to prevent premature failures in these areas.

### Conventional gun:

Gun:	JGA 502/3 Devilbiss or equivalent
Fluid nozzle:	EX
Air cap:	704
Atomization pressure:	60 - 65 psi
Pressure in the tank:	10 - 20 psi
Dilution:	5%

### Airless Gun:

Use Airless:	Use at least pump 60: 1
Fluid pressure:	1500 - 2500 psi
Hose:	3/8" internal diameter

Nozzle:	0,015" - 0,021"
Dilution:	Max. 5%

### Brush:

Only recommended for touch up small areas or stripe coat (screws, nuts, weld and sharp edges). Use a brush 75 to 100 mm wide for larger surfaces and 25 to 38 mm for touch up.

### Cleaning the equipment:

Pu diluent 5003

#### NOTE:

Do not leave material in the hoses, spray guns and equipment used in the spraying. Thoroughly wash all equipment used.

Clean all equipment immediately after use.

#### PERFORMANCE IN THE APPLICATION

For a good performance of the product, we recommend following the directions below:

Light colors may require more than one coat for an even coverage.

In paintings carried out in front of the sea, if exposed to sea air, we recommend to wash with fresh water between coats eliminating settled impurities.

Do not apply the product after the pot life has expired.

We recommend coating only if the surface temperature is at least 3 °C above the dew point temperature.

For better application properties, the coating temperature should be between 21 - 27 °C prior to the mixing and application.

Variations in color, aspect and gloss (more noticeable in dark colors) may occur, as well as delay in curing and low coating performance, when applied during periods of high air relative humidity, rainy days, low temperatures or drying the coating outdoor.

The temperature of the substrate, the weather and environmental conditions during the application and during the curing of the product, and the thickness of the coat may interfere in the product drying time.

The product allows the coating over recently hydroblasted surfaces with small traces of flash rust equivalent to the "moderate" grade described in standard SSPC VIS4 (I) / NACE No. 7.

For further information, consult WEG Technical Department.

#### SAFETY PRECAUTIONS

Product developed for industrial use intended for handling by qualified professionals.

Please read carefully all the information contained in the MSDS of this product, available at: [www.weg.net](http://www.weg.net).

Store in a covered, well-ventilated area. 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.

Wear protective gloves / protective clothing / eye protection / face protection.

Avoid release this product and its packaging, as well as materials used during handling and application in the environment.

#### NOTE:

The information contained in this technical datasheet is based upon the experience and knowledge

acquired in the field by the technical team of WEG.

If using the product without previous inquiry to WEG Coating concerning its suitability for the customer's intended purpose, the customer is aware that the use shall be its exclusive responsibility, WEG not being responsible for behavior, safety, suitability or durability of the product.

Some information contained in this datasheet are estimated, and can undergo variances arising from factors outside the manufacturer's control. Thus, WEG does not guarantee and does not assume any responsibility regarding the yield, performance or any other material or personal damage resulting from the incorrect use of the products concerned or the information contained in this Technical datasheet.

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