



W-THANE ENG 049

PRODUCT DESCRIPTION: High-performance 2-pack aliphatic acrylic polyurethane direct to metal. It provides good chemical resistance and continuous weathering resistance, excellent adhesion to carbon steel and color and gloss retention, high resistance to atmospheric agents and some solvents, high performance in terms of hardness, impact and abrasion.

RECOMMENDED USES: Recommended for coating metallic structures, agricultural and road implements, machinery and equipment.

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	15	20	L
	Component B	5	5,5	L

CHARACTERISTICS:		Color:		
		Ral, Munsell or as per customer standard.		
Gloss:		Gloss >80 UB		
Volume solid:		39 ± 5% (ISO 3233).		
Expiry Date:		12 months at 25 ° C - Component A 06 months at 25 ° C - Component B		
Thickness per coat (dry):		40 µm –60 µm		
Theoretical coverage:		7,9 m ² /l without dilution in the thickness of 50 µm dry. Without considering the loss factors in the application.		
Resistance to dry heat:		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.		
Drying:				
		10°C	25°C	35°C
Touch:		50 minutes	30 minutes	25 minutes
Handling:		5 hours	3 hours	150 minutes
Final:		240 hours	168 hours	152 hours
Repainting Drying:		10°C	25°C	35°C
	Min	16 hours	12 hours	8 hours
	Max	48 hours	48 hours	48 hours

SURFACE PREPARATION The surface must be clean, dry and free of any contaminants. Completely remove oils, greases and fats, as described in the SSPC-SP 1 standard.

The performance of this product is related to 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 Abrasive Blasting process

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).

It is recommended a roughness profile between 40 and 60 µm.

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.

Treatment of Steel Carbon Surfaces

Completely remove oil from the surface with clean cloths soaked in cleaning solvent according to SSPC SP1. Whenever cleaning a surface with cloths, replace them to avoid saturation. Do not use cotton waste or colored cloths.

For further information, consult WEG Technical Department.

PREPARATION FOR APPLICATION

Mixture

Homogenize the contents of each component by means of mechanical or pneumatic stirring (A and B). Ensure that no sediment is settled at the bottom of the package. Add component B to component A, at the recommended proportion (volume), under stirring, until complete homogenization, observing the mixing ratio.

Mixing ratio (Volume)

3 A X 1 B.

Diluent Pu diluent 5003

Dilution

Depending on the application method, dilute at most 10%

The quantity of diluent may vary depending on the type of equipment used and the ambient conditions during the application.

Only add the diluent after the 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 of the film and appearance and hinder the attainment of the specified thickness.

Pot life of the mixture (25°C)

3 h

In hot areas, we recommend consulting WEG Technical Department.

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 the spraying characteristics.

Before the application, make sure the equipment and its components are clean and in the best condition.

Purge the compressed air line to prevent contamination of the coating.

After mixing the 2-pack products, if there are stops in the application, and the pot life is exceeded (the coating presents variation in its fluidity), it can no longer be diluted for further application.

Reinforce 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:	10%



NOTE:

Brush:

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

Roller:

Not recommended.

For application with brush, application in two or more passes may be necessary to obtain a uniform layer according to

Cleaning the equipment:

Pu diluent 5003

Do not leave the catalyzed product in contact with the equipment used in the application, because the coating will present variations in fluidity at temperatures above the specification in the pot life and will harden, making the cleaning difficult.

Clean all equipment immediately after use.

PERFORMANCE IN THE APPLICATION

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

In paintings executed on the seafront, if exposed to the action of sea air, we recommend to wash with fresh water between coats eliminating the settled impurities.

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

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

Minor variations in color, appearance and gloss (more noticeable in dark colors) may occur, as well as delay in curing and impairment of surface performance, when applied during periods of high air relative humidity, rainy days, low temperatures or in case the coated parts are put to dry outdoors.

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 applied film may interfere with the product drying time.

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

It should not be applied under adverse conditions, such as air relative humidity (RH) above 85%, as changes in color and appearance may occur.

Polyurethane systems (component A and B) present sensitivity when exposed to air relative humidity, which can cause flaws in the dry film and reduction of pot life. Therefore, we recommend that the packages of each component be properly closed after use and kept in dry places protected from bad weather.

In coatings with variation in the application method in the same job, the final appearance and gloss of the painted surfaces may present differences.

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.

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 of the 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 prior 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 the behavior, safety, suitability or durability of the product.



Certain information contained in this datasheet is merely an estimate, 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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