TECHNICAL DATA SHEET

LACKTHANE N 2677

PRODUCT DESCRIPTION:

Gloss high-solids two-component aliphatic acrylic polyurethane topcoat with excellent coverage. Product developed to compose an anti-corrosion protection system with high sealing power, chemical and weathering resistance.

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:

It complies with Petrobras Standard N 2677.
This product, when supplied to comply with the RoHs Directive (Restriction of Certain Hazardous Substances) has the letter R in its description.
Pre-qualified according to NORSOK M-501, Edition 5, System 1.
NORSOK M-501, Edition 6, System 1.
Certified in category C3H, C4H, C5H and CX of ISO 12944:2018 - When applied as a finishing coat over certified primers.

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

PACKAGING:

Component	Content	Package	Unit of measurement
Component A	3	3.6	L
	16,65	20	
Component B	0,6	0.9	L
	3,35	4	

CHARACTERISTICS:

Color: Ral, Munsell or as per customer standard.

Gloss: Gloss >80 UB

Volume solid: 65 ± 2% (ISO 3233).

Shelf-Life: 24 months at 25°C

Thickness per coat (dry): 60 µm –70 µm

Theoretical coverage: 10 m2/l without dilution in the thickness of 65 µm dry. Without considering loss factors in application.

Resistance to dry heat: Maximum temperature 120 °C . The product retains its physical and chemical properties up to the temperature of 120 °C however, variations in the coating color and gloss may occur from 60 ºC (140°F).

Drying:

	10 °C	25 °C	35 °C
Touch:	7 hours	4 hours	3 hours
Tackiness:	12 hours	8 hours	5 hours
Final:	300 hours	168 hours	168 hours

Overcoating Drying:

	10 °C	25 °C	35 °C
Min	12 hours	8 hours	5 hours
Max	2 days	2 days	2 days

SURFACE PREPARATION

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

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

Application over primer
The product must be directly applied to a specific primer in order to form a suitable coating system.

NOTE: Observe the product overcoating interval to apply the next coat. In case the maximum overcoating interval has been exceeded, it is necessary to manually/mechanically sand the surface to break the gloss of the previous coat and clean the sanding residues so as to provide better adhesion between the coats.

The primer surface should be clean, dry and free of any contaminants, and the topcoat should be applied within the specific primer overcoating interval (refer to the primer data sheet).

For further information, consult WEG Technical Department.

PREPARATION FOR APPLICATION

Mixture
Homogenize the contents of each component with mechanical or pneumatic stirring (A and B). Check there are no sediment 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)
5 A **X** 1 B.

Diluent

PU Diluent 5003	For temperatures lower than 25°C (77°F).
PU Diluent 5004	For temperatures between 25°C (77 °F) e 35°C (95°F).
PU Diluent 5007	For temperatures above 35°C (95°F) and oven drying.

Dilution
Depending on the application method, dilute at most. 15%

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

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

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

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)
2 h
The pot life is reduced with a higher room temperature.

The pot-life test is performed according to the Brazilian standard ABNT NBR 15742; however, different volumes of coating prepared at once combined with different ambient and coating temperatures will influence the pot life, and different results than those mentioned in this data sheet may be found.

Induction time (25°C)
No induction time required.

In hot areas, we recommend consulting WEG Technical Department.

APPLICATION FORMS

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

In the spray application, make a 50% overlap in each gun pass, concluding with a cross pass. This technique is used to avoid uncovered and unprotected areas and to obtain a suitable aesthetic finish.

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

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.

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

Conventional gun:

Gun:	JGA 502 DevilBiss or equivalent
Fluid nozzle:	EX
Air cap:	704
Atomization pressure:	50 - 70 psi
Pressure in the tank:	10 - 20 psi
Dilution:	15%

Airless Gun:

Use Airless:	Use at least pump 60: 1
Fluid pressure:	2000 – 3000 psi
Hose:	⅜” internal diameter
Nozzle:	0,011" - 0,021"
Dilution:	Max. 10%

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.

Roller:
Use a short-pile, seamless lamb's wool or synthetic wool roller.

For application with brush and/or roller, two or more passes may be necessary to obtain a uniform layer according to the recommended film thickness per coat.

Cleaning the equipment:

NOTE:

Clean all equipment immediately after use.

Do not leave catalyzed product in contact with the equipment used in the application, because the coating will vary in fluidity at temperatures above specificated in the pot life and will cure faster, making the cleaning difficult.

Furthermore, it is a good working practice to periodically wash the spray equipment along the day. The cleaning frequency will depend on the amount sprayed, temperature and elapsed time, including all delays.

PERFORMANCE IN THE APPLICATION

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

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.

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.

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

Before application, the weather conditions must be observed: There should be no threat of rain or drizzle. The surface temperature must be at least 3°C (37.4°F) above the dew point and the relative humidity must not exceed 85%.

Under adverse weather conditions indoors and/or outdoors with high relative humidity, rain, or drizzle, low or low temperatures and excessively high temperatures, variations in color and other product characteristics may occur. Consult the WEG Technical Department for more information.
Product not recommended for painting the interior of tanks

Polyurethane systems (component A and B) present 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.

We recommend coating only if the surface temperature is at least 3°C (37,4°F) above the dew point temperature.

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

For better application properties, the coating temperature should be between 21°C - 27 °C (69.8°F - 80.6 °F) prior to the mixing and application.

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

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.

For further information, consult WEG Technical Department.

COMPATIBILITY OF SYSTEMS AND MAINTENANCE REFINISHING

The primer overcoating interval should be respected before applying the topcoat. If the maximum recommended overcoating interval is exceeded, manual/mechanical sanding is necessary to break the gloss. The primer surface must be dry and free of any contaminants.

In situations where the nature of the primer is unknown, it is recommended to test the compatibility of the product in a small area. Check the original material is well adhered. All loose coating must be removed. Points with corrosion or application over aged coatings should be treated according to technical guidance.

The direct application of this product on zinc-rich ethyl silicate-based primers, alkyd primers, coal tar-based coatings and other single-component primers is not recommended. When necessary to apply the topcoat over one of the primers mentioned above, we recommend the application of an appropriate intermediate coating.

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 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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