



ZINC SILICATE ETHYL N 1661 PD

PRODUCT DESCRIPTION: Inorganic silicate ethyl paint of bicomponent zinc. It complies with Standard Petrobrás N 1661, offering galvanic anticorrosive protection to carbon steel. Items which comply with Directive Rohs have the description R in the product name.

INTENDED USES: Anticorrosive primer for protecting metallic structures, plates, bridges, containers, port cranes, internal painting of tanks under guidance. Widely used in the Off Shore and naval industry, as well as in maritime oil rigs.

PACKAGING:

Component A	ZINC SILICATE ETHYL N 1661 PD Gray – 10001907 (2.16 L) Gallon
Component B	ZINC SILICATE ETHYL N 1661PD – 10001917 (1.44 L)

PRODUCT INFORMATION:	Colors	Gray			
	Gloss/Aspect	Matte	15 – 30 GU		
	Volume Solids	54 ± 2% (N 1358)			
	Shelf Life	6 months at 25 °C			
	Dry Film Thickness	75 micrometers dry			
	Theoretical Coverage	7.19 m ² /liter in thickness of 75 micrometers dry and without dilution. Without considering the loss factors in application.			
	Resistance to Dry Heat	Continues 450°C and discontinues from 500°C			
	Drying Information				
			10°C	25°C	35°C
	Touch		15 minutes	10 minutes	8 minutes
Handle		80 minutes	1 hour	45 minutes	
Final		192 hours	168 hours	144 hours	
Overcoating Data					
		10°C	25°C	35°C	
	Min.	24 hours	16 hours	12 hours	
	Max.	-	-	-	

COPY FOR INFORMATION



SURFACE PREPARATION

The performance of this product is associated with the degree of surface preparation. Completely remove oil, grease and fat applying a degreasing product or as per cleaning method with solvent of standard SSPC SP1.

The accumulated dirt must be removed, using a dry brush and the soluble salts must be removed, washing with fresh water at high pressure.

Preparation by Abrasive Blasting

We recommend executing the painting on surfaces blasted to grade Sa 2½ or as per standard SSPC SP10. Visual standard ISO 8501-1.

Evaluate the surface after the blasting, observing the presence of surface defects revealed after the treatment, adopting appropriate practices to minimize the defects through grinding or filling.

A rugosity profile of 40 to 85 micrometers is recommended.

For further information contact the Technical Department of WEG (tintas@weg.net).

APPLICATION

Mixing

Homogenize the contents of each one of the components by means of mechanical or pneumatic stirring (A and B). Ensure that no sediment is retained at the bottom of the packaging. Add component B to component A, in the proportions (volume) indicated, under stirring, until complete homogenization, respecting the mixture ratio. Then, pass the mixture by a sieve 80 -100 mesh. The application can only be done with equipment which has mechanical stirring during all the application.

Mix Ratio
2.16A X 1.44B in volume

Thinner
Diluent ETHYL SILICATE 9001 – Recommended
Diluent ETHYL SILICATE 9002 – It shall be used when the ambient or substrate temperature is high, or, for ambient with air humidity below 50%.

Thinning
Depending on the application method, dilute at **most 10% in volume.**

The amount of diluent may vary depending on the ambient conditions during the application.

Only add the Diluent after completing the mixing of components A + B. Do not dilute with solvents which are not allowed by the local legislation or exceed the dilution percentage indicated.

Excessive dilution of the paint can alter the forming of the film, the aspect and make it difficult to obtain the thickness specified.

Pot Life
4 hours at 25 °C.

Induction Period (25°C)
Wait 15 to 20 minutes before application.

Note: In places of great heat, we recommend contacting the Technical Department of WEG.



APPLICATION METHODS

The data below is a guide, similar equipment being able to be used.

Changes in the pressures and sizes of the nozzles may be required to improve the spraying features.

Before application ensure that the equipment and respective components are clean and in the best condition.

Empty the compressed air line to avoid contamination of the paint.

After mixing the bicomponent products, if stoppages occur in application, and they exceed the useful life of the mixture (where the paint has variance in its fluidity), it can no longer be diluted again for later application.

Reinforce all the sharp edges, cracks and weld beads with the wide paintbrush, to avoid premature flaws in these areas. When applying by spraying, make an overlap of 50% of each spray gun application, to avoid having uncovered and unprotected areas, ending with a cross transfer.

Airless Spray Gun:

- Use Airless 60:1
- Fluid pressure..... 2500 – 3000 psi
- Hose 1/4" Internal diameter
- Nozzle 0.021" to 0.036"
- Filter Mesh 60
- Dilution.....-

Conventional Spray Gun:

- Spray gun JGA 5023-67 Devilbiss
- Fluid nozzle AV 617 EE
- Air cover MB 4039 – 67 (with ring)
- Atomization pressure 60 to 65 psi
- Pressure in tank 10 to 20 psi
- Dilution Max. 10%

Wide Paintbrush:

Not recommended.

Roller:

Not recommended.

Equipment Cleaning: Use Diluent Ethyl Silicate 9001.

Note: Do not let the catalyzed product remain in contact with the hoses, spray guns and equipment used in the application, after the useful life time of the mixture has elapsed.

Completely wash all the equipment used.



APPLICATION PERFORMANCE

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

We recommend a preparation of the surface to grade Sa 2½ or SSPC SP10. Visual standard ISO 8501-1.

In painting executed on the coast, if exposed to the action of salty air, we recommend washing with fresh water between coats eliminating the impurities deposited.

Do not apply the product after the mixture pot life, if this time is exceeded.

It is recommended that before applying the subsequent coat, a cure test is executed with specific solvent as per standard ASTM D 4752. Value 4 indicates a satisfactory cure grade, reapplication being able to be executed.

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

When the relative air humidity is less than 50% use Silicate Ethyl Diluent 9002 and spray fresh water two hours after ending the application. For an appropriate cure of the film, it may be necessary to spray fresh water periodically.

There may occur small variances of color, aspect and gloss of the parts applied in periods of high relative air humidity, rainy days, in places with low temperatures or in situations in which the parts are applied and placed to dry in external environments.

The temperature of the substratum and climatic and environmental conditions may interfere in the drying time of the product.

For better application properties, the paint temperature shall be between 21-27°C, before mixing and application.

It shall not be applied in adverse conditions, as relative air humidity (RH) above 85% or condensed surfaces, as the gloss and color may undergo small alterations.

In painting executed varying the method of applying paints in the same work, it may generate differences of gloss and final aspect of the parts painted.

During the application the paint prepared, shall remain in constant movement. The non-use of stirring can cause sedimentation of the zinc, leading to problems of painting, as lack of adherence, cracking and splitting. The same problems can occur in applications above the recommended thickness.

The paint ZINC SILICATE ETHYL N 1661 cannot be used for reapplication. If there is a failure in the painting, or, low layer, the application shall be corrected with an appropriate product (LACKPOXI N 1277).

For further information contact the Technical Department of WEG (tintas@weg.net).

SYSTEM COMPATIBILITY AND MAINTENANCE RECOATING

Do not dispense with the correct washing and degreasing of the surface for applying the subsequent coat.

We recommend applying an appropriate intermediary product before applying the finishing.

For further information contact the Technical Department of WEG (tintas@weg.net).



SAFETY PRECAUTIONS

Before handling this product it is essential to read carefully all the information contained in the chemical product safety information sheet (MSDS), available at our site, at the electronic address indicated at the end of this technical bulletin.

The preparation of the surface, handling and use of paints during the painting and drying, as it concerns inflammable products, must be performed in ventilated places, far from flames, sparks or excessive heat, using appropriate personal protection equipment (PPE) for the stage to be executed.

Contact with the skin can cause irritation.
If swallowed, do not induce vomiting. In the case of contact with the eyes, wash them abundantly with water. In either case, seek medical aid immediately.

Do not smoke in the work area.

Ensure that the electrical installations are perfect and do not cause sparks.
Do not use diluent to clean the skin, hands and other parts of the body. To clean the hands use alcohol, and then wash with water and appropriate cleaning pastes.

If there is a fire, use CO2 or chemical powder extinguishers. It is not recommended to use water to extinguish the fire produced by burning paint.
Paints and diluents must be stored in ventilated places protected from bad weather. The temperature can oscillate between 10 and 40°C.

If symptoms of intoxication by inhaling chemical vapors occur, the intoxicated person must be removed immediately from the work place to ventilated places.
If fainting, call a doctor immediately.

Product intended for use and handling of professionals linked to the painting area.

This product shall be applied and used, in compliance with all the National Health, Safety and Environment standards and regulations.

If it is necessary to remove the paint already applied and hardened from the substratum, the operator and the people who are in the same environment shall use appropriate personal protection equipment (PPE), as indicated in the safety information sheet (MSDS).

In situations where it is necessary to execute processes of welding metallic parts painted with this product, powder and gases will be released (smoke) which will require the use of appropriate personal protection equipment (masks with activated charcoal filters and even remote air supply equipment) in accordance with each environment.

The applications in confined areas require suitable ventilation, besides specific methods and procedures. For these situations contact the safety area of your company.

For further information contact the Technical Department of WEG (tintas@weg.net).

NOTE

The information contained in this technical bulletin 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 bulletin 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 Bulletin.

The information contained in this technical bulletin is subject to periodic modification, without prior notice, due to the policy of evolution and continuous improvement of our products and services, providing solutions with quality to satisfy our customers' requirements.