SYLPYL 3480 WB

PRODUCT DESCRIPTION:

It is a water-based, solvent-free coating that acts as a fire barrier. It is sublimating, intumescent, fire-resistant, insulating, and flame-retardant, offering high effectiveness. In addition to preventing fire spread, it protects structural steel from overheating, maintaining its strength during fire exposure. It serves as a form of passive fire protection in buildings.

RECOMMENDED USES:

It can be applied to structural steel surfaces such as columns, beams, metal decks, tanks, and supports. It is also compatible with concrete, brick, drywall, and wood walls and partitions. For galvanized surfaces and metal decks (steel), the product W-POXI GNP 415 should be used as a primer coat, followed by the application of SYLPYL 3480 WB until the desired final thickness is reached.

CERTIFICATIONS AND APPROVAL:

Complies with UL 263, ASTM E-119, URC 7-1, NFPA 251, UBC-S101, ANSI A2.1, as well as equivalent standards ISO 834 and BS 476 Part 20.

When this product is supplied in compliance with the RoHS Directive (Restriction of Certain Hazardous Substances), it includes the letter R in its nomenclature description.

PACKAGING:

Component	Content	Package	Unit of measurement
Monocomponente	3,6	3,6	L
	20	20	

CHARACTERISTICS:

Color:	White
Gloss:	Matte 15 – 30 UB
Volume solid:	69 ± 2% (ISO 3233).
Shelf-Life:	12 months at 25ºC (77°F)
Thickness per coat (dry):	250 µm –3000 µm
Theoretical coverage:	1,42 m²/L without dilution at a 250 µm dry thickness. Loss factors in application are not considered.
Resistance to dry heat:	Maximum ambient temperature 60°C. The product retains its physical and chemical properties up to 60°C, but above this temperature, variations in the paint properties may occur.
Drying:	**20ºC (68°F)**
Touch:	30 minutes
Handling:	48 hours
Final:	240 hours
Overcoating Drying:	**20ºC (68°F)**
Min	8 hours
Max	120 hours

SURFACE PREPARATION

The performance of this product is related to the degree of surface preparation.

Completely remove oils, greases, and dirt by applying a degreaser or following the solvent cleaning method in SSPC SP1 standard.

On steel: It is recommended to apply one coat of primer SYLPYL 13 (solvent-based), SYLPYL 113 AS (high solids and low VOC), or SYLPYL 120 AS (with VOC < 100 g/l). SYLPYL 3480 WB is compatible with high-quality alkyd primers.

On previously applied primer: Remove loose parts, surface dust, and undesirable contaminants. Avoid sea breeze, dirt, and other contaminants between system layers. If the previous primer is damaged, eliminate oxidation by mechanical or manual means and repair with primer SYLPYL 13, SYLPYL 13 AS, or SYLPYL 120 AS.

On concrete: Remove loose parts, surface dust, and undesirable contaminants. Avoid sea breeze, dirt, and other contaminants between system layers. Apply one coat of SYLPYL 77 as a primer, then apply SYLPYL 3480 WB as a fire barrier.

NOTE: Observe the product's recoat window for the application of the subsequent coat. If the maximum recoat interval is exceeded, surface hand/mechanical sanding is required to break the gloss of the previous coat, followed by cleaning the dust.

Surface treatment through Abrasive Blasting process

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

A roughness profile between 40 and 60 µm is recommended.

Inspect the freshly blasted surface for the presence of surface defects that may be revealed after this stage, adopting appropriate practices to minimize such defects through grinding, filling with weld, and/or epoxy putty.

If oxidation occurs on the substrate between the abrasive blasting completion and the start of painting, the surface should be blasted again until the specified visual standard is met.

For areas near marine environments, it is necessary to wash with fresh water at low pressure (minimum 3,000 psi) before abrasive blasting. In some cases, it may be necessary to repeat the washing procedure after abrasive blasting to remove any soluble contaminants that may have deposited on the surface, followed by another abrasive blasting.

Treatment of Steel Carbon Surfaces

Hard surface layers (such as those resulting from flame cutting) must be removed by grinding before beginning abrasive blasting.

All welds should be inspected and, if necessary, repaired before finishing the abrasive blasting. Porosities, cavities, weld spatter, etc., should be repaired through proper mechanical treatment or weld repair; in other areas, round off sharp edges and corners (r ≥ 2 mm, ISO 8501-3).

For further information, consult WEG Technical Department.

PREPARATION FOR APPLICATION

Mixture

Homogenize the contents of the container by mechanical or pneumatic agitation. Ensure that no sediment is left at the bottom of the container.

Diluent

Water.

Dilution

Depending on the application method, dilute up to a maximum of 5%.

In very hot locations, we recommend consulting the Technical Department at WEG.

APPLICATION FORMS

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

Changes in pressure and nozzle sizes may be necessary to improve spray characteristics.

Before application, ensure that equipment and components are clean and in optimal condition.

Reinforce all sharp corners, cracks, and weld seams with a brush to avoid premature failures in these areas.

It can be applied using spraying equipment or airless spray..

Manual application:

With a roller or brush, aiming for a uniform finish.

Conventional gun:

Gun:	JGA 5023-67 Devilbiss ou equivalent
Fluid nozzle:	AV 617 EE
Air cap:	MB 4039 – 67 (with ring)
Atomization pressure:	50 - 70 psi
Pressure in the tank:	10 - 20 psi
Dilution:	10%

Airless Gun:

Use Airless:	Use at least pump 60:1
Fluid pressure:	2000 – 3000 psi
Hose:	¼" internal diameter
Nozzle:	0,031" a 0,035"
Filter:	Mesh 60
Dilution:	Max. 5%

Brush:

Recommended only for touch-ups of small areas.

Roller:

Use a short nap, seamless lamb's wool or synthetic wool roller for epoxy paints.
Not recommended for internal tank painting..

or application with a brush and/or roller, it may be necessary to apply in two or more coats to achieve a uniform layer according to the recommended film thickness.

Cleaning the equipment:

Water

NOTE:

Clean all equipment immediately after use.

It is also good practice to periodically clean the spraying equipment throughout the day. The cleaning frequency will depend on the amount sprayed, temperature, and elapsed time, including any delays.

PERFORMANCE IN THE APPLICATION

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

The substrate temperature, the existing weather and environmental conditions during application and throughout the curing process, and the film thickness applied may affect the drying time of the product.

We recommend painting only if the measured surface temperature is at least 3°C (37.4°F) above the dew point temperature.

Small variations in color, appearance, and gloss (more visible in darker colors) may occur, as well as delays in curing and compromised performance of applied surfaces during periods of high relative humidity, rainy days, in areas with low temperatures, or situations where pieces are applied and placed to dry in outdoor environments.

In coastal areas exposed to sea breeze, we recommend washing with fresh water between coats to eliminate deposited impurities.

Application should only be done with equipment that has mechanical agitation throughout the application.

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

Applying thicknesses above the recommended may result in paint film failures, such as cracking, fissures, or fractures.

When varying the painting application method on the same project, differences in gloss and final appearance of the painted surfaces may occur.

For further information, consult WEG Technical Department.

SAFETY PRECAUTIONS

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

Carefully read all the information contained in the Safety Data Sheet (SDS) for this product, available at: www.weg.net.

Store in a covered, well-ventilated area. Keep the container tightly closed and away from heat or ignition sources.

Use only in well-ventilated areas, avoiding the accumulation of flammable vapors. Keep the product away from heat and ignition sources.

Do not inhale mist/vapor/aerosols generated during handling and/or application. Use protective gloves/protective clothing/eye protection/face protection.

Empty containers and materials with traces of paint should be disposed of according to current legislation. Take care of the environment.

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 case of using the product without prior consultation with WEG regarding its suitability for the purpose the customer intends to use it for, the customer acknowledges that the use will be at their own risk, and WEG is not responsible for the behavior, safety, suitability, or durability of the product.

Some information mentioned in this bulletin is only estimates and may vary due to factors outside the manufacturer's control. Therefore, WEG does not guarantee and assumes no responsibility for performance, results, or any material or personal damage resulting from the incorrect use of the products in question or the information contained in this Technical Data Sheet.

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