

VX Savior EP 180DW Drinking Water Protective Coating is a two-component, fast-drying, solvent-free epoxy coating. Component A consists of epoxy resin, additives, and pigments/fillers, while Component B is a modified amine. The product features excellent adhesion, abrasion resistance, and other physical and mechanical properties, as well as good chemical resistance. After mixing the two components, it has a long working time and low viscosity, making it suitable for application using conventional high-pressure airless spraying equipment.

This product is non-toxic and harmless, meeting the limits specified in 21CFR 175.300 of the U.S. Food and Drug Administration (FDA) for Resin and Polymer coatings.

Its sanitary quality complies with the requirements of the Ministry of Health's "Hygienic Evaluation Specification for Equipment and Protective Materials in Drinking Water Distribution" (2001).

TECHNICAL DATA

Colour	White
Gloss	Semi-gloss
Mass Solids Content	99±1%
Volume Solids Content	Semi-gloss
Specific Gravity	White
Volatile Organic Compound Content	<60g/L
Mass Solids Content	99±1%
Flash Point	Mixed: >100°C Component A: >100°C Component B: >100°C

Note: The above data is a reference for specific colours. Values may vary slightly with different colours and batches.

APPLICATION

Suitable for use as a protective coating for potable water contact surfaces, such as water pipelines, water tanks, and drinking water compartments on ships.

PACKAGING

Product:
25.4 kg per Set

Component A:
22.2 kg per Drum

Component B:
3.2 kg per Drum

SUBSTRATE TREATMENT

Before application, remove water, oil, and old paint from the substrate surface. Perform sandblasting or shot blasting to clean the surface, achieving a rust removal grade of Sa2.5 with an anchor profile depth of 30-70µm. Use high-pressure air to blow off iron filings, abrasive particles, and other debris such as removed paint or phosphating coatings.

Areas with cracks or damage should be treated to the specified standards (e.g., Sa2^{1/2} (ISO 8501 1:2007) or SSPC SP6 abrasive blasting standard, or SSPC SP11 power tool cleaning standard) and touch up the primer before application.

APPLICATION

Application Parameters

Recommended Dry Film Thickness	300µm
Recommended Wet Film Thickness	300µm
Theoretical Coverage	0.45kg/m ² ; 0.3L/m ²
Mixing Ratio (by weight)	Component A : Component B = 22.2 : 3.2
Thinner	0821 Hamgar Epoxy Coating Thinner (for cleaning only)
Pot Life	120 minutes (5°C), 60 minutes (20°C), 45 minutes (30°C)

Construction Method

Mix	This product is supplied as a set, packaged in two separate containers. Always mix the entire set of paint in the specified ratio. Once mixed, it must be used within the specified pot life. 1. Use a power mixer to stir the base (Component A). 2. Add all the hardener (Component B) to the base (Component A) and thoroughly mix with a power mixer.		
	Airless Spraying	Air Spraying	Roller / Brush
Nozzle Size	0.5-0.8mm	-	-
Spraying Pressure	180 - 280 bar	Air Spraying	Roller / Brush
Thinning Ratio (by volume)	No Thinning Required	Air Spraying	Roller / Brush

Drying Data (Typical Dry Film Thickness 100µm)

Temperature	Surface Dry Time	Hard Dry Time	Fully Cured	Recoat Interval	
				Min	Max
5°C	32h	96h	7 Days	96h	7 Days
15°C	16h	48h	7 Days	48h	7 Days
25°C	8h	24h	7 Days	24h	7 Days
35°C	4h	12h	7 Days	12h	7 Days

Note: The maximum recoat interval depends on the exposure environment of the coating. If the maximum recoat interval is exceeded, the surface of the paint coating must be sanded to increase roughness and ensure adhesion between layers.

SHELF LIFE

At 25°C: Component A : 12 months
 Component B : 12 months

Inspection is required thereafter. Store in a dry, cool environment away from heat and fire sources.

CONSTRUCTION CONDITIONS

- The recommended minimum surface temperature is 5°C, and the maximum surface temperature is approximately 35°C. It is advised to stop work if the temperature falls below 5°C.
- Generally, the environmental humidity should be less than 65%, and the substrate temperature must be at least 3°C above the dew point. Outdoor work is not allowed in adverse weather conditions such as rain, snow, strong winds, or heavy fog.
- Gloss and surface smoothness depend on the application method. Avoid mixing multiple application methods as much as possible.
- Traditional airless spray application typically provides the best gloss and appearance.
- For recoating after weathering or aging, ensure the surface is thoroughly cleaned before applying subsequent layers. Remove any loose, aged layers and all surface contaminants such as oil, grease, crystalline salts, and road dust, and ensure surface roughness by power tool sanding.
- Adhesion on aged coatings may be lower compared to new coatings but still meets the required purposes.
- This product is not recommended to be thinned with a diluent.
- Condensation on the surface during or after application can result in a lack of gloss and the formation of poor-quality coatings. Early exposure to standing water can cause color changes, especially with dark paints and under low-temperature conditions.
- If severe chemical or solvent splashes may occur, please contact Hongjia Industrial Coatings for information regarding suitability.

PRODUCT RESPONSIBILITY

The information provided in this product manual is not exhaustive. Any person using this manual to apply any products not specifically recommended by us, without first obtaining our written confirmation, does so at their own risk concerning the suitability of the product for its intended purpose. While all advice or statements provided regarding the product (whether in this manual or otherwise) are believed to be correct to the best of our knowledge, we cannot control the quality or condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we have specifically agreed to such practice in writing, we do not accept any responsibility for any product performance issues or for any loss or damage resulting from the use of the product (to the fullest extent permitted by law). We make no express or implied warranties or representations, including but not limited to implied warranties of merchantability or fitness for a particular purpose, through legal action or otherwise. All supplied products and technical guidance are subject to our standard terms and conditions of sale. You should request a copy of these documents and read them carefully. The information contained in this product manual will be modified according to experience and our evolving policies. It is the customer's responsibility to ensure that they have the latest version of the product manual by checking with the local representative before using the product.