



## PRODUCT DESCRIPTION

21EP800 is a two component, high performance, multi-purpose Industrial and marine epoxy designed to provide exceptional protection in salt and fresh water immersion and against corrosive chemical environments. 21EP800 will resist wear & abrasion, providing extended corrosion protection. It is suitable for intermittent acid, alkali and chemical splash zones and marine environments.

21EP800 typical applications include structural or support steel, concrete, tanks, equipment, piping and concrete flooring. It can also be used as a tie coat over inorganic zinc rich coatings.



## Application & Equipment

Spray application is preferred for proper film build and best performance. Brush application is acceptable for touch up. Synthetic roller with 1/4" - 1/2" nap application is acceptable however new rollers should be thoroughly wet with the specified reducer and spun vigorously to remove loose fibers. Roller application may require special care to prevent bubbling and may require more than one coat to attain proper film thickness. Apply at 8-12 mils wet film thickness to achieve 5.0 -8.0 mils dry film thickness.

Apply in good weather when air and surface temperature are above 50°F and surface temperature is at least 5°F above the dew point. For optimum application properties, material should be between 70°F to 100°F prior to mixing and application. Maintain unmixed material in closed containers in protected storage at 40°F to 100°F.

Conventional Spray - DeVilbiss MBC gun with E tip and 30 air cap or equal at 40-60 psi atomizing pressure and 10-25 psi pot pressure, 3/8" ID product fluid hose, double regulated pressure pot with oil and moisture separator.

Airless Spray - Minimum of 30:1 ratio pump, 0.021" to 0.025" tip, 3/8" ID Teflon material fluid hose not longer than 50 feet.

**Note:** During breaks or any period of work stoppage, material should be removed from hoses and equipment. Release pressure from equipment and flush hoses and equipment with 00TR066 reducer. Do not repressurize equipment until ready to resume work. Clean all equipment immediately after use with 00TR066 reducer. Completely flush all spray equipment with this solvent. Occasional flushing of spray equipment during the course on the working day helps prevent buildup and possible clogging.



## Mixing

Mixing ratio 4:1 by volume (4 part base to 1 part activator)

Induction: 20 minutes @ 60°F-80°F (16°C-27°C)

Thinning: Use recommended reducer as supplied by 21st Century Coatings (00TR066)  
Reduction is not normally required however, in extreme environmental conditions, reduction up to 10% by volume is permitted depending on local VOC and air quality regulations.

This is a two component coating supplied in two containers as a unit. Always mix a complete unit in the proportions supplied. (1) Mix the contents of Component A thoroughly with an agitator. (2) Mix the contents of Component B and mix thoroughly with a power agitator. (3) Combine the entire contents on Component A and Component B and mix thoroughly with a power agitator. Allow 15 minute induction time @ 60°F-80°F (16°C-27°C) before using the coating. Usable pot life depends on the temperature of the material. Refer to Pot Life section. Agitate before use. Occasional stirring during use is suggested.



## Pot Life

8 Hours @ 24°C / 75°F If product thickens, do not reduce, but discard and mix fresh material.

However, these times may vary with environmental or climatic conditions



## Curing

Dry to touch: 2 hours  
Hard cure: 12 hours  
Full cure: 7 days  
Recoat: 8 hours minimum, 5 days maximum

For immersion service, allow 7 days curing time





## Colors & Finishes

Off White, Grey and Black  
Semi-gloss 45 to 50 units @ 60 degrees



## Surface Preparation

Good surface preparation is essential to a satisfactory coating system. Surfaces to be coated should be clean and dry. Remove all oil, grease, mildew or other contamination by solvent or detergent cleaning or other effective means.

**New or Unfinished Surfaces - Ferrous Metal:** For best performance, application to abrasive blasted surface is recommended. Commercial blast cleaning SSPC-SP6 (Sa 2) is recommended as the minimum. For immersion service, Near White Blast cleaning SSPC-SP10(Sa 2 1/2) or is considered minimum. Proper blast media and blasting equipment shall be used to produce an average depth profile of 2.5 mils minimum. Do not reuse abrasive blast media. Remove blasting dust and grit from surfaces before painting. Blasted surfaces should be coated within 8 hours after blasting or before rusting or other contamination of the surface occurs. If blasting is not feasible, remove rust by "Hand or Power Tool Cleaning". (SSPC-SP2 or SP3) For rusty surfaces remaining after cleaning, use 21RC600 prior to the application of 21EP800.

**Concrete:** Must be clean, dry, properly cured and free from all surface contaminants. "Brush Off Blast" (SSPC-SP7) to provide an etched surface and to remove contaminants and laitance. Remove dust before coating.

**Previously Finished Surfaces:** Repair all damaged areas. Remove gloss from previous paint by sanding or "Brush Blasting" (SSPC-SP7). Remove rust, corrosion products, heavy chalk and loose or peeling paint by "Hand or Power Tool Cleaning" (SSPC-SP2 or SP3). Spot prime and bare areas as in new work above. If doubt exists concerning compatibility of this coating with previous system, apply coating to a representative area (25 ft<sup>2</sup> minimum) and allow to cure and age several weeks. Then inspect for adhesion failure, wrinkling, lifting, blistering or any other sign of incompatibility. If there are no signs, then work can proceed.



## Coverage

Solids content (+/- 2%):	55% by volume
Number of Coats:	One only at 125-175 microns / 5-7 mils DFT (8-12 mils wet) 2 coats may be applied as required
Coverage (theoretical):	294 ft <sup>2</sup> per gallon @ 75 microns / 3 mil DFT



## Storage & Handling

Hazardous Goods: Paint, Flammable Liquid, UN1263 Class III Hazchem 3YE  
Shipping Information: 5.1 kg/11.2 lbs. per gallon unit including container

Flash Point (Setaflash): >24°C min

Shelf Life: One year from date of manufacture when stored at 20°C (70°F)

21EP800 must be stored and handled in compliance with all current and local regulations applying to flammable, or highly flammable liquids. Keep in cool, dry protected storage, well ventilated, between 5°C-35°C / 40°F-95°F and out of direct sunlight, moisture or rain. Maintain unmixed material in sealed containers at all times.

21EP800 has a minimum shelf life of 12 months from date of manufacture if stored as indicated above, unopened in sealed containers. Ensure both components are consistent in appearance and viscosity after stirring.



Read each component's material safety data sheet before use. Mixed material has hazards of both components. Safety precautions must be strictly followed during storage, handling and use. Please read our health and safety data sheet.

