



PRODUCT DESCRIPTION

21EP812™ is a 100% solids, state of the art epoxy coating for applications in humid or moist environments and cure at low temperatures. 21EP812™ may be applied over a variety of substrates and is suitable for application on steam and oil pipelines operating at elevated temperatures up to 150°C (300°F). 21EP812™ will cure under very humid conditions including an underwater environment.

21EP812™ may be used as a refurbishment or repair coating and has excellent resistance to moisture and offers superior corrosion resistance. 21EP812™ is suitable for use in various extreme environmental conditions.



Application & Equipment

Airless spray is recommended. Primer applied to all welded seams, erection brackets scars etc. should be applied by brush or roller prior to spray application.

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.

Airless Spray: Bulldog 33:1 or King 56:1 Graco pump or equivalent 100 lb. line pressure using 3/8" diameter or 1/2" material line and 0.021"-0.025" orifice. An in line heater will improve atomization when existing ambient temperatures are between 40°F and 70°F. A circulating line is recommended to prevent material setting up in heater.

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 Xylene or MEK. Do not repressurize equipment until ready to resume work. Clean all equipment immediately after use with Xylene or MEK. 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 1:1 by volume (1 part base to 1 part activator)

To facilitate mixing and application, store this product in a warm place (60°F minimum). Mix in the ratio of 1 Parts A to 1 Part B by volume. Stir pigmented components thoroughly before combining. Combine Parts A and B in the base container and power mix for 2-3 minutes. Material may be used immediately.

Reduction: reduction is not necessarily required but 8 oz. of MEK may be added to a mixed four gallon kit to improve and refine spray pattern.



Pot Life

Mixed material should be used up within 1 hour. Elevated temperatures will reduce pot life. Do not attempt to apply material which has become too thick. It must be discarded. Mix only enough material for use within expected potlife.

Pot life time may vary with environmental or climatic conditions



Curing

@70F, 50% relative humidity

To Touch: 1-3 hours

To Recoat: 1-3 hours depending on conditions

Immersion: 3 hours

Recommended maximum recoat time is two weeks. If recoating thereafter, inspect and remove surface contaminants. Apply representative "test patches" to confirm adhesion. If recoating after 60 days, high pressure detergent wash and/or surface abrading may be necessary.

Ensure forced ventilation of tank interiors during application and curing of this coating to ensure complete solvent release.





Colors & Finishes

black, silver, off-white, grey



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 31RC600™ (not for water potable use) prior to the application of 21EP812.

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. 41CR200™ moisture cured penetrating sealer may be used to seal concrete prior to application of epoxy.

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 ft² 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%):	100% by Weight 100% by volume
Number of Coats:	2 coats at 200-350 microns each / 8-14 mils DFT Spray
Coverage (theoretical):	160 ft ² per gallon @ 250 microns / 10 mils DFT



Storage & Handling

Hazardous Goods:	Paint, Flammable Liquid, UN1263 Class III Hazchem 3YE
Shipping Information:	5.6 kg/12.4 lbs. per gallon unit including container
Flash Point (Setaflash):	>149°C/300°F min
VOC content:	0.0 grams per liter / 0.0 lbs. per gallon
Shelf Life:	One year from date of manufacture when stored at 20°C (70°F)

21EP812™ 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.

21EP812™ 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.

