

**21EP818™ Self Levelling High Solids Gloss
Flooring Epoxy**
rev 02/05

PRODUCT DESCRIPTION

21EP818™ is a two component, 91% solids sprayable epoxy polyamide coating specially designed for use on and in concrete, steel tanks, secondary containment, industrial flooring and walls where extreme hardness, impact and chemical resistance is required. 21EP818™ forms a tough, dense waterproof film that offers excellent impact, abrasion, alkali, solvent and chemical resistance.

This material displays fast reactivity, better system protection during cure time and ease of application and mixing. 21EP818™ may be used in restaurants, food preparation areas as well as factories, barns, industrial and commercial shops, chemical plants and automotive shops.



PHYSICAL PROPERTIES

Heat Distortion Temperature °C	29-32
Flexural Strength, psi	13,400
Flexural Modulus psi x 10 ⁵	5.9
Tensile strength, psi	9,200
Tensile modulus, psi x 10 ⁵	5.4
Percent elongation	2.3
Compressive strength, psi	14,300
Compressive modulus, psi x 10 ⁵	3.8

APPROVALS

Canadian Food Inspection Agency Approved

CHEMICAL RESISTANCE

(24 hr spot test) Rating System	
(5=no effect, 4=slight softening/blistering, 3=moderate, 2=severe softening/blistering, 1=film destroyed)	
Gasoline	5
Methanol / Ethanol	5
Skydrol	5
MEK	4
Acetone	5
Xylene	5
10% acetic acid	5
10% nitric acid	5
70% sulfuric acid	5
50% sodium hydroxide	5
37% hydrochloric acid	5



Application & Equipment

Airless spray is recommended.

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 0.015"-0.021" 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.

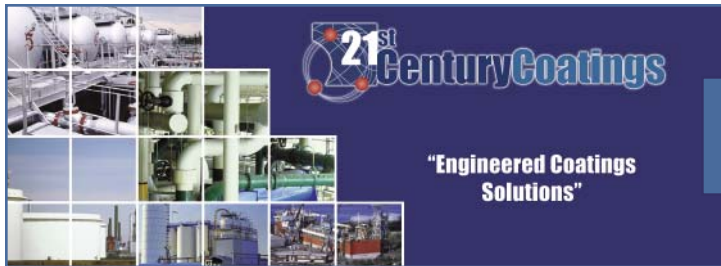


Mixing & Activation

Mixing ratio 3:1 by volume (3 part base to 1 part activator)
Activator: 21AC818

To facilitate mixing and application, store this product in a warm place (60°F minimum). Mix in the ratio of 3 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. Allow 15 minutes of induction prior to application.

Reduction: use xylene or 00TR066 to reduce to desired viscosity for application.



Pot Life

Mixed material should be used up within 2 hours. 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: 6-8 hours
To Cure: 24 hours

To Recoat: 8-10 hours depending on conditions
Immersion: 5-7 days minimum



Colors & Finishes

White or grey. Tinting is not recommended.
Semi-gloss or Gloss



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.

Concrete, Concrete Block (CMU): Remove loose or excess mortar, efflorescence, laitance and concrete form release or curing compounds that impair adhesion. Abrade, scarify, acid etch, or sand blast.

Previously Finished Surfaces: Clean and prepare as indicated above. Remove loose peeling paint, chalk, rust, mildew, or other contaminants. Abrade smooth, glossy surfaces. Apply a test patch to confirm adhesion and compatibility.



Coverage

Solids content (+/- 2%): 94% by Weight
91% by volume

Number of Coats: immersion service 2 coats recommended minimum 40 mils DFT (1000 microns)
Foot traffic and walls - 1 coat recommended minimum 20 mils DFT (500 microns)
Vehicular traffic - 2 coats recommended minimum 40 mils DFT (1000 microns)

Coverage (theoretical): 118 ft² per gallon @ 250 microns / 10 mil DFT
2.9 M² per litre @ 250 micron / 10 mils DFT



Storage & Handling

Hazardous Goods: Paint, Flammable Liquid, UN1263 Class III Hazchem 3YE
Shipping Information: 6.14 kg/13.5 lbs. per gallon unit including container

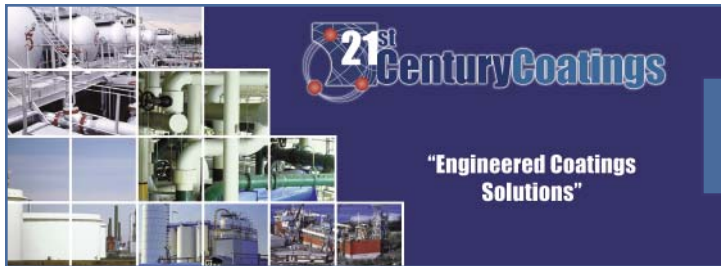
Flash Point (Setaflash): 27°C (80°F) min

VOC content: 222 grams per liter / 1.86 lbs. per gallon

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

21EP818™ 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.

21EP818™ 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.



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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.

LIMITATION OF REMEDIES:

21st Century Coatings (Canada) Ltd., makes no express warranty implied by law or otherwise with respect to this product and expressly disclaims liability for consequential or incidental damages. Buyer's sole remedy shall be refund or replacement of products purchased.