

## DURALAC Epoxy Solvent-free coating 1220 Series

### **Description:**

**DURALAC Epoxy S.f. Coating 1220 Series** is a high quality non-toxic pigmented two-component Coating based on epoxy resins, designed for application where a high-build epoxy is needed, providing a durable wear and scrub resistance and superb chemical and detergent resistance where continuous hygienic conditions are required.

### **Area of Use:**

**DURALAC Epoxy S.f. Coating 1220 Series** is a general protective and decorative coating, used on cement, concrete, mosaic, steel and wooden surfaces of campus, sports courts, workshops, industrial plants and internal protective lining for potable water concrete and steel tanks.

### **Technical Data:**

Generic Type	Amine-Polyamide Epoxy	Viscosity @ 25 °C	70 – 80 KU
Pigment Type	Titanium Dioxide & Select Inerts	Flash Point (Seta)	≥85 °C
Volume Solids	100%	Specular – Gloss @ 60°	70 – 80%
Color	As per specified color card	Surface Temperature at Application – Min	10 °C
Theoretical Coverage	20m <sup>2</sup> /liter @ 50 µm dft	& Relative Humidity – Max	80%
Film Thickness – Wet	120 – 240 µm	Surface must be dry and at least 5° above the dew point.	
– Dry	120 – 240 µm	Reducer	NA
Dry Time @ 25 °C & 50% RH – To Touch	50 – 70 min	Reduction – Brush	Do not thin
– To Recoat	5 – 7 hours	– Roller	Do not thin
– Full Curing	7 days	– Spray	Do not thin
Dries By	Chemical Cure	Clean Up Thinner	<b>X275 Thinner</b>
Dry Heat Resistance – Intermittent	200 °C	Mixing Ratio (by volume)	1:0.6
Specific Gravity (mixed as recommended)	1,32±0,02	Induction Time @ 25 °C	≤5 Minutes
Storage Temperature – Min.	5 °C	Pot Life @ 25 °C	40 Minutes
– Max.	35 °C	<b>Volatile Organic Compound (VOC)</b>	
Storage Time	2 years from production date	Unthinned	Grams/Liter 0
Analysis, typical – may vary by color: 1210 as mixed with 1210-1		<b>Federal Specifications Generic Equivalent</b>	
Pigment: 30%	Vehicle: 70%	TT-C-535-a	
Titanium Dioxide . . . .83%	Epoxy Resin . . . . 90%		
Inert Pigments . . . . 17%	Additives . . . . 1%		
100%	100%		

### **Surfaces Preparation:**

The substrate to be painted should be suitably dry, clean, free from loose material, dust, grease, oil and any other contamination. Treat any areas affected by mould, lichens, algae and moss with fungicidal solution. Confirm that the correct surface preparation and pre-treatment is carried out.

### **System Information:**

Metal Surfaces			Concrete, Cement & Gypsum Surfaces		
Product	Coat	µ	Product	Coat	µ
DURALAC Epoxy Zinc Phosphate Primer 1020	1	50	DURALAC Epoxy S.F. Clear Sealer 1210	1	25
<b>DURALAC Epoxy S.F. Coating 1220 Series</b>	<b>2</b>	<b>120</b>	<b>DURALAC Epoxy S.F. Coating 1220 Series</b>	<b>2</b>	<b>120</b>

Stir thoroughly before use. Add all the hardener to the resin in a ratio of 0,6 part (hardener 1220-1) to 1 part (resin 1220) and mix for 2-3 minutes.

Standard packages are in pre-measured kits and should be mixed as supplied. We recommend that the kits not be broken down unless suitable weighing equipment is available.

Allow mixed material to sweat-in for 5 minutes before starting application.

Before top coating, make sure the previous coat has tacked off.

**Repaintings:**

For previously epoxy coated surfaces, grind with mechanical fine graded sand paper, wash with etching solution, rinse thoroughly with water to remove all residues. Allow to dry well, patch with compatible primer then use **DURALAC Epoxy S.F. Coating 1220 Series**.

**Packing:**

Available in USG, Component A (resins)= 2,27 liters to Component B (activator)= 1,33 liters.  
 20 liters Pail, Component A (resins)= 12,6 liters to Component B (activator)= 7,4 liters.

**Application:**

**BY TWIN-FEED SPRAY:**

**DURALAC Epoxy S.F. Coating 1220 Series** is recommended to be applied by hot twin-feed spray, e.g. Graco Hydra-Cat, with turn-nozzle 0,018 -0,026".

The components must be kept at a temperature of 20 to 25 °C before use so that they are fluid enough for the feed pumps. The ratio of the dosage pump must be 1:0,6. The heating of the components shall be adjusted so that the temperature on the gun is 40 - 50 °C.

The pot life of the mixture is the 10 min. If necessary, the hoses must be heated. The film thickness is controlled by a wet film gauge. Check the feed pump consumption of the components to ensure the correct mixing ratio.

To fill the pores in concrete surfaces, a coat of 200 - 250µm is first sprayed and smoothed by brush or rubber spatula over porous areas. Immediately thereafter another coat is applied to achieve the total coat thickness of 500µm. Directions given by the manufacturer of the twin-feed spray are to be followed when working.

**BY AIRLESS SPRAY:**

**DURALAC Epoxy S.F. Coating 1220 Series** can be thinned maximum 5% with **X275 Thinner** for painting small areas and for touching up or repainting. The paint is to be applied with an efficient airless spray or with a brush. Immediately before use the components are mixed in correct mixing ratio. The mixture is stirred thoroughly with a drilling machine. Before spraying the mixture is circulated thorough the hoses back to the mixing vessel until the mixture is warm.

**WARNING!** The amount and the temperature of the mixture will affect the pot life. The spray equipment is damaged if the paint is left into the spray. The painting equipment must be cleaned immediately after use. The hose and gun must also be rinsed during the work after every 20 -30 liters batch.

If the interval between the coats is 1 -2 days, good adhesion can be ensured by wiping the surface with **X275 Thinner**, which softens the paint film and makes it sticky. Whenever the maximal overcoating interval is exceeded, the adhesion can be secured by rubbing down the surface.

**BY ROLL:**

The components must be kept at a temperature of 20 to 25 °C before use so that they are fluid enough to be mixed with mechanical mixer, let sweat for maximum 5 minutes, pour the mixed product at once in strips on premeasured areas to reach the desired thickness.

**General Information:**

- Do not apply when the air or substrate temperatures are likely to fall below 10 °C or when the relative humidity is above 80% during application or the drying period.
- Substrate to be treated must not exceed 5% by weight moisture content.
- Under normal conditions this product will remain usable for up to two years if stored correctly and unopened.
- Store in a cool, dry and ventilated place. Keep container closed when not in use.
- All cited parameters must be considered as guidelines only.

**SPECIFIER NOTE:** for maximum bond strength steel shot blasting is always the first recommendation, however aesthetics is often a concern of many owners that may view the shot blast path offensive. When specifying thin film coatings, acid etching is often the preferred method of preparation because it does not leave obvious "blast paths" or "track lines." Careful attention shall be given to the use of chemical preparation including but not limited to local regulations regarding disposal of "spent acid."

**Performance Standards:**

Test	Results	Test	Results
ASTM D 695 Compressive Strength	17,500 psi	Motor Oil	No effect
ASTM D 4060 CS 10 Wheels,1000gm Load/1000 Cycles	18 g	Urine	No effect
ASTM D 638 Tensile Strength	2,500 psi min	100% Xylene	No effect
ASTM D 790 Flexural Strength	5,900 psi	100% Mineral Spirits	No effect
ASTM D 2240 Shore D Hardness 7 days cure	80	ASTM G 53 Accelerated aging via exposure to fluorescent, ultraviolet and condensation	600 hours – slight change
ASTM D 635 Flamability	Self-extinguishing	ASTM B 117 Salt spray test @ 85 °C	100 hours – No effect
MIL D 3134 Adhesion Strength	2,200 psi		

### **Health and Safety:**

**Warning!** If you scrape, sand or remove old paint, you may release lead dust. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE**

- When preparing or painting all surfaces avoid the inhalation of dust and paint mist.
- Ensure good ventilation and use mask and safety gloves while applying.
- Avoid skin contact, spoiled skin should immediately be washed.
- In case of eye contact, flush with plenty of water and consult a doctor.
- If accidentally swallowed seek medical attention immediately.
- Smoking, eating and drinking must be prohibited in the application area.
- Keep away from food, children and animals.
- Do not empty into sewer, watercourses or access routes to septic tanks.
- **IN CASE OF: FIRE** – Use foam, CO2, dry chemical, or water fog.

**SPILL** – Absorb with inert material and dispose of in accordance with applicable regulations.

**For more information on safety hazards and precautions, please refer to the product MSDS.**

### **FOR PROFESSIONAL USE ONLY**

The line manufacturing process is batch checked, ensuring traceability in the event of any incident. The quality system employed includes the actual design of every item and the controls in its fabrication, both of the raw materials used to ensure uniformity of manufacture and the end product obtained.

### **Disclaimer:**

For proper use and correct application of the product, a prior reading of the technical features is indispensable.

The data provided in this technical specifications was obtained to the best of our knowledge under normal laboratory conditions and on standardised bases, and may vary depending on the working conditions. The working conditions of the users are at all times beyond our control, we cannot guarantee anything but the quality of the product itself. The product must not be used for purpose other than those specified.

We have a technical-commercial team at your disposal to help you with any queries.

Due to standards and specification evolution, the company reserves the right to change the given data without prior notification.

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Certification

