



COROCRETIN UA

(Protective Coatings)

DESCRIPTION

COROCRETIN UA is a pigmented two component, solvent containing protective coating product based on epoxy resin with a formulated amine hardener.

USES

- ❖ It is a universal coating system for cement bound surfaces such as concrete, plaster, asbestos cement, as well as steel.
- ❖ It is generally suitable for the protection of vertical and horizontal surfaces, which are subject to normal mechanical loads and aggressive chemicals.
- ❖ Some of the important application areas includes containers and silos in the chemical industry, in the food industry, water storage tanks, swimming pools, nuclear reactor installations, sewage works, septic tanks, sewage containers, neutralization basins, sewage pipes etc.

ADVANTAGES

- ❖ It is hard and has good abrasion resistance. Resistant to water, seawater, alkalis, acid, solvents and oil.
- ❖ It is virtually impermeable to carbon di-oxide and therefore protects the concrete against carbonization, which is especially important for the corrosion protection of reinforcing steel bars.
- ❖ It is weatherproof and practically free from any tendency to yellow with age.
- ❖ It is used in the temperature range of -30°C to $+150^{\circ}\text{C}$ (dry heat) and up to $+80^{\circ}\text{C}$ (wet heat). This can be exposed to 250°C (dry heat) and 120°C (wet heat) for a short duration of time.

PROPERTIES

Type	Two pack cold cure
Mixing Ratio by weight, Comp. A : Comp. B	4 : 1
Pot life at 27°C , in hours, min.	3 - 4

Density, gms / cm^3 , at 27°C	1.2 - 1.3
% Solids	65
Touch dry at 25°C , in Minutes	90
Tack free time at 27°C , in minutes, min	40
Dry to handle, in hours	3
Hard dry, in hours	12
Curing time, days	7
Over coating interval, in hours	24-48
Number of coats recommended	2 / 3
Dry film thickness on steel per coat, min in microns	70
Method of application	Brush / Roller / Spray
Finish	Matt
Thinner	COROCRETIN 'U' Thinner

APPLICATION INSTRUCTIONS

Surface preparation:

For Concrete:

The surface should be thoroughly cleaned, so that it is free from dust, laitance and other contaminants. The cement laitance is removed from the surface by acid etching, mechanical scarification or by sand blasting.

In addition, the surface should be dry, firm and free from oil, grease and other contaminants.

For Steel:

For old structures, the surface should be free from loose rust and scale particles. It is necessary that sand blasting is carried out to Sa 2½ finish for good bonding.

If blasting is not practicable, use of mechanical tools along with manual chipping and wire

brushing is recommended to remove loose rust and scale.

In addition, metal surfaces should be free from oil, grease or other impurities, which can impair the adhesion.

Mixing:

Mix the individual components (Component A & Component B) separately for homogeneity. Mix 4 parts of Component A with 1 part of Component B by weight thoroughly, for uniform mixing, and apply using conventional brush, roller or spray.

Typical Coating Specification

For Cement Plaster :

Primer:

COROCRETIN IHS-BV, an epoxy based cold cure, two-pack system should be used as primer.

COROCRETIN IHS-BV Comp. A 3 part by weight

COROCRETIN IHS-BV Comp. B 1 part by weight.

Both the components are individually mixed thoroughly for homogeneity and then mixed together in the above recommended ratio and applied using the conventional brush.

Putty:

Make a putty by adding silicious fillers to COROCRETIN IHS-BV and level the surface with a putty blade, for filling cavities and surface evenness.

Top Coat:

Apply 2 or 3 coats of COROCRETIN UA, depending upon the severity of condition, as per the recommended over coating interval.

For RCC Surface:

Impregnation:

COROCRETIN BI, a solvent containing, colourless, two-component system based on epoxy resin with formulated hardener, should be used as concrete impregnator, in following ratio.

COROCRETIN BI Comp. A 3 Part by weight
COROCRETIN BI Comp. B 1 Part by weight

Both the components are individually mixed thoroughly for homogeneity and then mixed together in the above recommended ratio and applied using the conventional brush.

Because of its low viscosity and high capillary action, COROCRETIN BI forces itself into the substrate and covers all pores and capillaries.

Note: *If the concrete is dense, impregnation can be avoided.*

Primer:

Prepare a mixture of COROCRETIN BI and COROCRETIN UA, mixed in the ratio of 1 : 1 by volume or 1 : 1.4 by weight.

Both the products, COROCRETIN BI and COROCRETIN UA are individually prepared as per their respective ratio and then mixed together in the above recommended ratio and applied using the conventional brush.

Top Coat:

Apply 2 or 3 coats of COROCRETIN UA, depending upon the severity of condition, as per the recommended over coating interval.

For Steel :

Primer:

COROCRETIN ZNP, an epoxy based cold cure, two pack system should be used as primer.

COROCRETIN ZNP Comp. A 9 Part by weight
COROCRETIN ZNP Comp. B 1 Part by weight

Both the components are individually mixed thoroughly for homogeneity and then mixed together in the above recommended ratio and applied using the conventional brush.

Top Coat:

Apply 2 or 3 coats of COROCRETIN UA, depending upon the severity of condition, as per the recommended over coating interval.

Note

1. For containers coming in direct contact with food stuff or drinking water, the coating should be steam cleaned or repeatedly

COROCRETIN UA

washed several times, with hot water. After this, wash with 10% Citric acid to ensure complete cleaning.

2. If over coating is to be done over the existing old coating, then the surface should be thoroughly abraded to make it rough.
3. Do not apply the coating when the temperature falls below 10°C or when the relative humidity exceeds 75% at 10°C or 85% at 25°C or during rain, fog or mist.
4. After application, COROCRETIN UA should be protected from moisture (rain, dew) for a period of 2 hours.

COVERAGE

COROCRETIN IHS-BV (Primer)	4 – 5 Sq.mtr / Kg / Coat
COROCRETIN BI (Concrete Impregnator)	4 Sq.mtr / Kg / Coat
COROCRETIN ZNP (Primer)	4 Sq.mtr / Kg / Coat
COROCRETIN UA (Concrete Impregnator)	4 – 5 Sq.mtr / Kg / Coat

PACKING

COROCRETIN IHS-BV (Primer)	Comp.A1	5, 30, 110, 220 Kg
	Comp.B1	5, 25, 30, 100 Kg
COROCRETIN BI (Impregnator)	Comp. A	4.5, 13.5 Kg
	Comp. B	1.5, 4.5 Kg
COROCRETIN ZNP (Primer)	Comp. A	4.5, 18 Kg
	Comp. B	0.5, 2 Kg
COROCRETIN UA	Comp. A	4, 16 Kg
	Comp. B	1, 4 Kg

STORAGE & SHELF LIFE

COROCRETIN UA as supplied shall be stored in a cool and dry place away from sunlight; moisture and high humidity, naked flame and have a minimum shelf life of 12 months in the original packing.

HEALTH & SAFETY

COROCRETIN UA contains resins, hardeners which may cause sensitisation by skin contact. Avoid contact with skin and eyes and inhalation of vapour. Wear suitable protective clothing, gloves and goggles while handling.

ADDITIONAL INFORMATION

CUMI-PRODORITE also supplies other construction chemicals, concrete repair and rehabilitation products including protective coatings, epoxy and polyurethane coatings and floor toppings, acid, alkali and chemical resistant brick / tile linings, Rubber lining, Chemical storage tanks, vessels, scrubbers, pipes and fittings, other custom-built items in FRP, PP-FRP, PVC-FRP & PVDF-FRP, FRP Gratings, etc.

WARRANTY

Whilst Carborundum Universal Ltd. strives to ensure that any advice, information or recommendation given are appropriate and correct, it cannot accept any liability directly or indirectly arising out of the products, since the method and place of application of the products are beyond its control. Its guarantee is therefore limited to the quality of materials delivered.

CARBORUNDUM UNIVERSAL LIMITED

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