EPOXY CR 510

TECHNICAL DATA SHEET

DESCRIPTION

EPOXY CR 510 is a solvent free, two components epoxy coating system. It exhibits very good appearance and chemical and physical properties. It has a LOW VOC content of 12 g/L. It has very good solvent and chemical resistance.

ADVANTAGES

- Dense surface, resistant to bacteria and moisture and easy to clean
- May apply several layers on itself
- Contains no solvent, allowing for interior application without harmful odors
- Excellent adhesive properties, allowing application on other film and hard coating, as well as a good bond to the substrate
- Antibacterial
- Excellent chemical and solvent resistance
- Exceptional abrasion resistance

USES

- Where harsh chemicals are used or stored
- Industrial plants
- Petrochemical facilities
- Food Processing Industries
- Battery manufacturing and storage areas
- Pulp and paper industries
- Electroplating operations
- Acid-etching environments
- Laboratories

TEST DATA

PROPERTY	RESULTS	TEST METHODS
Abrasion Resistance, mg loss CS-17	0.150	EN 13813
Wheel, 1,000 g load 1,000 cycles		
Pot Life	min. 40	ASTM D2471
Bond Strength, psi (MPa)	350 (2.4) 100%	EN 1504 - 2
Compressive Strength, psi (MPa)	14,000 (96)	C 40
Tensile Strength, psi (MPa)	3,000 (21)	F 5
Elongation, %	1.0	ASTM D638
Hardness, Shore D	75 – 80	

SURFACE PREPARATION

OLD CONCRETE

Concrete Surface Must Be Cleaned. Blastrac, Sand Blasting, Diamond Grinder W/30 Grit Or Coarse, Or Water Blasting Is Highly Recommended To Remove Surface Contaminates. Any Oils And Fats Must Be Removed Prior To Product Application. Acid Etching May Be Required (Followed By A Thorough Rinsing) To Open The Pores Of The Concrete To Accept A Primer. Do Not Apply To Wet Substrates. Chloride, Moisture, And Ph Levels Should Be Checked Prior To Application.

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NEW CONCRETE

The Concrete Should Be Allowed To Cure For A Minimum Of 30 Days. Compression Resistance Of Concrete Must Be At Least 25 Mpa (3625 Lbs./Inch2) After 28 Days And Traction Resistance Must Be At Least 1,5 Mpa (218 Lbs./Inch2). Blastrac, Sand Blasting, Diamond Grinder W/30 Grit Or Coarser Or Acid Etching (Followed By A Thorough Rinsing) Is Required To Remove The Surface Laitance That Appeared During The Curing Process. A Primer Should Be Used To Reduce Out-Gassing And Promote Adhesion.

MIXING

Materials should be pre-conditioned to a minimum of 10°C prior to use. Thoroughly mix each component separately. Pour component B into component A using the proper mixing ratio of 20A:5B by volume. Mix both components for at least 1 minute using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life of mixture.

APPLICATION

Apply mixed product on the prepared surface tightly (thin film) using a rubber rake and pass a roller to obtain a uniform coating. Avoid creating puddles.

CLEANING

Clean all tools and materials with the cleaner/thinner for epoxies. Wash hands and skin carefully with warm soapy water. Once product has hardened, it may only be removed through mechanical means.

RESTRICTIONS

- Minimum/Maximum temperature of substrate: 10°C / 30 °C
- Maximum relative humidity during application and curing: 85 %.
- Substrate temperature must be 3 °C above dew point measured.
- Humidity content of substrate must be < 4 % when coating is applied.
- Do not apply on porous surfaces where a transfer of humidity may occur during application.
- Avoid exterior use on substrates at ground level.
- Protect from humidity, condensation and contact with water during the 24 hour initial curing period.
- Surface may discolor in areas exposed to regular ultraviolet light.

CHEMICAL RESISTANT TABLE

REAGENT	RATING		
Acetic Acid - 5%	R	Lactic Acid - 50%	L
Acetone	R	Methyl Ethyl Ketone	L
Ammonia Hydroxide - 38%	R	Nitric Acid - 10%	R
Beer	R	Orange Juice	R
Bleach	L*	Peroxide - 35%	L
Brake Fluid	R	Phosphoric Acid - 85%	R
Citric Acid - 30%	R	Skydrol	R
Citric Acid - 40%	R	Sodium Hydroxide - 50%	R
Crude Oil	R	Sulfuric Acid - 20%	R
Diesel Fuel	R	Toluene	L

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Ethylene Glycol	R	Urea	R
Fatty Acids	R	Vinegar	L
Gasoline	R	Xylene	L
Hydrochloric Acid - 15%	R	50 % NaOH	R
Lactic Acid - 15%	L	Con. HCL	R

R - Recommended for continuous splash/spill service L - Limited recommendation (occasional spills, may cause slight stain or discoloration)

PACKAGING

35, kg set
Component A in one can of net 20 kg and Component B in one gallon of net 5 kg and Component C one pail is 10 kg (if required)

STORAGE

Storage the product in a cool and dry place.

SHELF LIFE

The product is 24 Months for Components A and B when stored properly in the original container unopened.

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