

Ambient cure multi-purpose system for civil applications

Description

Lapox Lacrete is two component modified, epoxy adhesive system. When both components are mixed in recommended ratios and cured appropriately at room temperature, an excellent bond strength can be achieved for concrete primer, epoxy grouts, epoxy mortars, repairing compound and as binder between old and new concrete. Faster productivity can be achieved, if curing is performed at higher temperature between 40°C and 60°C. Curing at higher temperature is recommended to achieve optimum bond strength.

Applications

Anti-corrosive coating for steel bars
Coating of civil structure
Grout
Mortar | screed
Primer
Sealing of cracks in concrete structure
Self-leveling floors

Advantages

Excellent adhesion to metal and concrete
Good vibration damping properties
High mechanical strength even in dynamic conditions
Tensile and compressive
Resistance to oil
Fuels and many other chemicals
Thermally stable and suitable to perform in extreme conditions
Very low shrinkage contributing to good dimensional stability

Typical specifications

Test	Unit	Reference	Value	
			Resin	Hardener
Description	-	Visual	Clear liquid	Clear, yellowish-brown, viscous liquid
Viscosity at 25°C ¹	m Pas	ASTM D2196	500 - 1,000	8,500 - 14,000
Colour	GS	ASTM D1544	-	Max 10
Colour	APHA	ASTM D1209	Max 100	-

¹Viscosity by Brookfield viscometer

Mix specifications

Test	Unit	Reference	Value
Mixing ratio (resin : hardener)	w/w	-	100 : 50
Mix viscosity at 25°C	m Pas	ASTM D2196	800 - 1,200
Pot life ¹	Minutes	ASTM D2471	65 - 85
Peak exotherm temperature ²	°C	ASTM D2471	Max 80
Specific gravity (mix mass)	-	-	1.05
Surface dry*	Hours	ASTM D5895	5
Touch dry*	Hours	ASTM D5895	8
Lap shear strength at 25°C ³	kg/cm ²	ASTM D1002	Min 90

¹Pot life of 100 g mix mass at 25 ± 1°C in plastic disposable cup by 'Gardco' gel timer

²Total 100 g mix mass in plastic disposable cup at 25°C

³Lap shear strength on prepared aluminum strips after 24 hours curing

*Drying time of 200 micron film on glass plate at 25°C

Recommended formulation and performance specifications for primer

Test	Unit	Primer
Resin Lacrete	PBW	100
Hardener Lacrete	PBW	50
Specific gravity	-	1.05
Coverage on concrete (150μ coat)	g/m ²	250 - 300
Coverage on metal (150μ coat)	g/m ²	200 - 250

Recommended formulation and performance specifications for mortar based system

Test	Unit	Self-leveling	Screed
Resin Lacrete	PBW	100	100
Hardener Lacrete	PBW	50	50
Defoamer K - 210	PBW	1 - 2	1 - 2
Quartz sand mix number 10	PBW	300 - 400	700 - 800
Specific gravity	-	1.80	2.00
Consistency of mix mass	-	Flowable	Trowelable
Compressive strength	kg/cm ²	600 - 800	900 - 1,000
Flexural strength	kg/cm ²	400 - 500	300 - 400
Area coverage	kg/m ² per mm	2.0	2.2

Recommended formulation and performance specifications for grouting of heavy machine foundation

Test	Unit	Self-leveling	Screed
Resin Lacrete	PBW	100	100
Hardener Lacrete	PBW	50	50
Quartz sand mix number 10	PBW	400 - 500	800 - 900
Specific gravity	-	1.80	2.20
Consistency of mix mass	-	Flowable	Trowelable
Compressive strength	kg/cm ²	700 - 800	900 - 1,000
Flexural strength	kg/cm ²	400 - 500	300 - 400

Sieve analyses of quarts sand mix number 10

B. S. Sieve number	(%) Retained
36	10
52	25
72	20
100	10
150	15
240	20

Packaging

Lapox Lacrete is available in 1.5 kg bottles, 7.5 kg HDPE jerry cans and 45 kg HDPE carboys. Other packing may be considered on request.

Storage and handling

Lapox Lacrete should be stored in a cool and dry place, preferably in a sealed container and should not be exposed to direct sunlight. This product has a shelf life of two years, if stored in its original container between 2°C and 40°C away from humidity and excessive heat.

Safety

Wear personal protective equipment (PPE). Avoid contact with the eyes and skin. In case of direct contact and irritation, it should be washed off immediately with soap and warm water. Avoid breathing vapours, mist or gas. Please refer to the Safety Data Sheet (SDS) of Lapox Lacrete for detailed safety instructions.

Spills and disposal

In case of spills, sweep up and shovel the spilled material. Keep spilled material in suitable, closed containers for disposal. Soak up with an absorbent such as clay, sand or other suitable material. Flush area with water to remove trace residue. Do not allow the product to reach the sewage system. Waste must be disposed of in accordance with federal, state or local regulations, as applicable.

Contact

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Note

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