

ABADUR-550

SOLVENT-FREE NOVOLAC EPOXY RESIN PROTECTIVE COATING

DESCRIPTION

ABADUR-550 is a solvent-free, excellent physical and chemical resistant modified novolac epoxy resin coating that offers concrete surface protection against a wide range of aggressive acids, alkalis and solvents. Compared to common epoxy coatings it displays higher chemical resistance and operate in higher temperatures.

FIELD OF APPLICATION

- Concrete and metal tanks
- Chemical tanks
- Surface protection against destructive chemicals
- Refinery and petrochemical
- Battery rooms
- Primary and secondary containment

ADVANTAGES

- Excellent chemical resistance against sulfuric acid, chlorinated solvents and alkalis
- Excellent adhesion
- Initial and final mechanical strength
- Excellent abrasion resistance
- Long life and durability
- Provides seamless surface

SURFACE PREPARATION

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2. Concrete must be cured at least 28 days prior to coating. The moisture content of the concrete should be below 4%. Concrete should have minimum compressive strength and pull off strength of 25 N/mm² and 1.5 N/mm² respectively. Surface must be clean, dry and all cracks in the concrete shall be filled by ABADUR-P1 and then primed with ABAPRIME-11.

TECHNICAL NOTE

Surface preparation shall not be done:

- At temperatures below 5 °C
- If relative humidity is more than 80%
- If surface temperature is less than 3 °C above dew point
- After day light hours on exterior locations.



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MIXING

Prior to mixing, stir part A using a mixer then add part B and mix them continuously for 3 minutes until a uniform mixture has been achieved. Make sure no unmixed component remains on the sides of the pail. Always mix such amount that shall be just sufficient to be used up within 10 minutes and changing the mix ratio must be avoided. Do not apply material beyond recommended pot life.

Pot life

Material temperature (°C)	15	25	40
Pot life (min)	60	20	10

APPLICATION

Apply the coating via airless spray or roller which descriptions are indicated below.

Airless spray	Tip Orifice: 0.025-0.21 in Fluid Pressure: 2000-3600 psi
Roller	100 micron dry film in each run

Surfaces may require recoating to achieve the desired dry film thickness according to the drying schedule. Note that coverage rate is surface profile and temperature dependent, therefore this schedule is based on recommended coating thickness, 600 micron, which requires 1 Kg/m² of mixture.

Drying Time

Temperature (°C)	Touch dry	Over coating		Full cure
		Min	Max	
15	8 hours	24 hours	2 days	12 day
25	5 hours	18 hours	1 day	7 day
40	3 hours	12 hours	18 hours	4 day



TECHNICAL PROPERTIES

Physical state	Viscous liquid
Color	Grey
Specific gravity (g/cm ³)	1.5 ± 0.1
Mix ratio (A:B)	7:1
Volume solids	98 ± 2
Recommended dry film thickness	600 µm
Number of layers	2
Application method	Airless spray, Roller
Induction time	None required
Ambient temperature (°C)	10-30
Surface temperature (°C)	10-30
Maximum relative humidity	85%

CHEMICAL RESISTANCE GUIDE

Chemical	Chemical resistance
Concentrated sulfuric acid	E*
Concentrated hydrochloric acid	E
Concentrated Hydrofluoric acid	NR*
Nitric acid 50%	NR
Nitric acid 10%	G*
Acetic acid 30%	NR
Acetic acid 10%	G
Citric acid 10%	Bad
Lactic acid 10%	G
NaOH solution 50%	E
Toluene	E
Xylene	E
Methanol	E
Butanol	E
MEK	G
Carbon tetrachloride	E

*E: Excellent, G: Good, NR: Not-Recommended

PACKAGING

12 Kgs set

Part A 10.5 Kg pail; Part B 1.5 Kg pail.



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STORAGE & SHELF LIFE

The shelf life for this product is 12 months if unopened, stored free from frost, moisture and direct sunlight. The optimum storage temperature is 10-30 °C.

HEALTH & SAFETY

Keep away from heat and open flame. Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

- 1-Circulate adequate fresh air continuously during application and drying.
- 2-Use fresh air masks and explosion proof equipment.
- 3- Prohibit all flames, sparks, welding and smoking.

MSDS is available at ABADGARAN website.

TECHNICAL SERVICE

The ABADGARAN INTERNATIONAL GROUP Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.



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