

ABADUR HP-350**HIGH PERFORMANCE EPOXY COATING WITH SUPERIOR CHEMICAL, ABRASION AND IMPACT RESISTANCE****DESCRIPTION**

ABADUR HP-350 is two-component solvent-free epoxy coating derived from modified polyamines which is capable of acting as a protective layer on various surfaces. The unique formulation of ABADUR HP-350 allows to being continuously cured after immersing in water. This property also results in better performance on wet surfaces. The raw material used in formulating ABADUR HP-350 coating, particularly enhance excellent adhesion to the metal substrate while there is no need to surface preparation by primers. Plus, excellent chemical, abrasion and impact resistance is expected in this coating.

ADVANTAGES

1. Excellent adhesion on either wet or dry surfaces
2. Capable of curing while being immersed in water
3. Superior chemical resistance
4. Extended durability in corrosive environments
5. Resistant to chlorine ions and seawater
6. High abrasion resistance
7. Excellent impact resistance on metal surfaces
8. No need for primers or extra final layer

FIELD OF APPLICATION

1. Metal made structures such as steel, iron and aluminum
2. Concrete, brick and gypsum based structures
3. Tidal zones of docks
4. Dams and refineries
5. Tanks containing chemicals and sewage

SURFACE PREPARATION**Concrete**

All surfaces should be clean, dry and free from curing compounds, release agents, troweling compounds, standing water, grease, oil, dirt, bitumen coatings and loose or disintegrating concrete. All poured and precast concrete must also have blasted, wire brushed or acid etched to remove laitance.

Metal

All surfaces should be clean, dry and free from contamination. Prior to application all surfaces should be assessed and treated in accordance with ISO 8504. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.



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Surface preparation shall not take place in the following conditions:

- At temperatures below 10 °C.
- When the surface temperature is less than 3 °C above the dew point.

APPLICATION

Material is supplied in two containers as one unit. Always mix a complete unit in the proportion supplied. Once the unit has been mixed it must be used within the working pot life specified.

1-Agitate Part A and B separately with a power agitator.

2-Combine entire contents of curing agent (part B) with base (part A) and mix thoroughly with power agitator.

3-Mix thoroughly for at least three minutes, scraping the container bottom and side to assure complete mixing. There is no induction or waiting time required after mixing before application.

ABADUR HP-350 coating can be applied using good quality rollers or short haired brushes or by airless spray. It is recommended that ABADUR HP-350 coating be applied in two coats to ensure complete coverage. Prior to the application of each coat the surface should be examined for signs of pin-holing, etc. If the over-coating is delayed more than the drying time table, the previous coat must be thoroughly abraded to give an adequate mechanical key and solvent wiped. In hot climate, material temperature should be 20 to 25 °C prior to mixing; otherwise pot life becomes very short. Do not thin for any reason.

TECHNICAL PROPERTIES

Color	Part A: gray Part B: cream Mixed: gray
Specific gravity (g.cm ⁻³)	1.4±0.1(g/cm ³)
Component Ratio by weight (A:B)	2:1
Volume solid (%)	100
Sea water resistance	Excellent
Adhesion to concrete (MPa)	2.5-3 (more than concrete adhesion)
Adhesion to metal (MPa)	≥10
Glass transition temperature T _g (°C)	60

DRYING TIME

Temperature	Touch dry	Over-coating		Full cure
		Min	Max	
15°C	8 hrs	25 hrs	2 days	13 days
25°C	4 hrs	8 hrs	16 hrs	7 days
40°C	2 hrs	4 hrs	10 hrs	4 days



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POT LIFE

Material temperature	15°C	25°C	40°C
Pot life	70 min	45 min	20 min

PACKAGING

Pre-batched Part A+B: 6 + 3 kg units. 9 kg at total.

STORAGE & SHELF LIFE

Shelf life: 12 months in unopened original package

Storage conditions: closed packed containers, away from moisture, sunlight and freezing

Storage temperature: +10°C and +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.

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.

All data presented in this technical datasheet are based on our last researches in ABADGARAN CONSTRUCTION CHEMICALS laboratories and are just as a guide for choosing appropriate material. Therefore users should conduct a sufficient investigation to establish the suitability and conformity of any product for intended uses.



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Chemical resistance guideline

ABADUR HP-350 is resistant against the chemical materials mentioned in below table based on ASTM C267 at 25°C.

Sodium hydroxide 10%	Ferric sulfide
Sodium hydroxide 50%	Sodium phosphate(solution)
Sulfuric acid 50%	Boric acid
Calcium hydroxide	formic acid 10%
Sulfide hydrogen	hydrofluoric acid
Hydrochloric acid 10%	Oxalic acid 25%
Citric acid 10%	alcohol ethylic
lactic acid 5-25%	Toluene
Citric acid 30%	Gasoline
Acetic acid 10%	Benzene
Phosphoric acid 10%	ethylene glycol
Malic acid 60%	Sea water
Tartaric acid 60%	Iodine
Ammonia 2%	magnesium nitrate
Ammonia 10%	potassium nitrate
Hydrogen peroxide 4%	ammonium nitrate
Ammonium chloride	magnesium acetate
Ammonium hydroxide	calcium acetate
Sulfate salts	Calcium chloride
Ethyl acetate	potassium chloride
formaldehyde 30%	Sodium chloride
Glycerin	Magnesium chloride
motor oil	magnesium sulfate(solution)
Potassium hydroxide 15%	magnesium carbonate (solution)
Potassium hydroxide 25%	Sodium carbonate(solution)
Carbonic acid	
Ammonium sulfide	
copper sulfide	



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