



# Advance Coat Epoclear

## High Performance Solvent Free Epoxy Mortar System

### Generic Type :

Three pack Solvent free epoxy / polyamide amine

### Description :

Advance Coat Epoclear is a solvent free epoxy system use as mortar system for concrete and steel. It can be apply on damp surface and new concrete. With special blended sand aggregate, it have excellent chemical, wear , toughness, abrasion and impact resistance and suitable to use for heavy duty mortar system.

### Typical Uses :

Can be used as protective and mortar system for concrete flooring where a high strength and durable mortar system is require for :

- Chemical Plant
- Pulp and paper mill
- Electronic factory
- Metal and stamping
- Other light and heavy industries

### Physical Data :

Color : Amber Clear  
 Flash Points : Base -  $^{\circ}\text{C}$  ; Hardener -  $^{\circ}\text{C}$   
 Volume solid : 100%  
 Shelf Life @ 20 $^{\circ}\text{C}$ /indoor : 24 months

### Application Details

Mixing Ratio: Base:Hardener =2:1 (by wt)  
 Mixture : Aggregate = 1 : 7 ~ 10 (by wt )  
 Base:Hardener=65:35 (by Vol)

Drying Time(at Dry Film Thickness 5mm)	Temperature	10 $^{\circ}\text{C}$	20 $^{\circ}\text{C}$	30 $^{\circ}\text{C}$
	Surface Dry	2.5hr	1.5hr	0.5hrs
Hard Dry	24 hrs	11 hrs	9 hrs	
Painting interval:	Minimum	24 hrs	11 hrs	9 hrs
	Maximum	10days	8 days	7 days
Pot life /working life		4 hrs	2 hrs	1.5 hrs
Operating time		24 hrs ( walk-on traffic ), 48hrs ( heavy traffic)		
Service temperature		60 $^{\circ}\text{C}$ (immersion) 150 $^{\circ}\text{C}$ (dry)		

### Application Data :

Application Method : trowel and compacting/levelling

Mixing Procedure : Power mix separately and then combine and power mix for at least two minutes or until homogeneous. When mixing partially, it is critical to follow to the mixing ratio as stated to ensure proper cure and film properties.

Curing schedule :

Complete curing – 7 days. Higher film thickness, insufficient ventilation, or lower temperature will require longer cure time. Excessive humidity or condensation on the surface can interfere with the cure cause discoloration and may result in a surface haze. Any haze must be removed by water washing before recoating. If the maximum recoat time have been exceeded, the surface need to sand or sweep blast prior to the application of additional coat.

This product requires the substrate temperature to be above the dew point ( + 3~5  $^{\circ}\text{C}$ ). Condensation due to substrate temperatures below dew point can cause flash rust on metal and adhesion will be affected.

### Application procedure :

Mix properly the two component before use.

- a) Flush equipment with thinner or AC Thinner A before use.
- b) Mix the base and hardener according to the stated ratio until homogeneous. Observe the pot life, at higher temperature, the pot life will be shorten.
- c) Thin only if necessary for workability.
- d) When applying by conventional spray, use adequate air pressure and volume for proper atomisation.
- e) Apply a wet coat in even parallel passes, overlap 50% to avoid holidays and pin hole.
- f) Clean up all equipment with thinner or AC thinner A immediately after use.
- g) Keep containers tightly close and store in proper storage area.

### Application methods :

Use trowel to spread and smoothen the surface, compact and level it by proper levelling equipment.

### Surface Preparation

General : Surfaces must be clean and dry, all contaminants like dirt, dust , oil must be remove by appropriate method to ensure good adhesion

Steel : SSPC –SP10 – SP 6  
 Surface profile : 38 – 75 microns

Concrete : The concrete must be thoroughly cured, and free of any contaminants such as oils, curing solution or mould release agents and must be free of dust at the time of application.



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### Performance Data :

Properties	Test Method	Evaluation
Adhesion	ASTM D4541	2.4N/mm <sup>2</sup> concrete failure
Compressive strength	ASTM C579	70N/mm <sup>2</sup>
Tensile strength	ASTM C307	40N/mm <sup>2</sup>
Flexural Strength	ISO 178	70N/mm <sup>2</sup>
Hardness	ASTM D2240	80 (Shore D)
Abrasion resistance	ASTM D4060	40 mg loss CS-17,1000cy
Impact Resistance	ASTM D2794	Withstand 16ft/lbs

Acid	Excellent	Good	Limited
Citric 10%	✓ □		
Acetic acid 10%		✓	
Lactic acid 5%		✓	
Sulphuric acid 20%			✓
Hydrochloric acid 20%		✓	
Nitric acid 20%		✓	
Phosphoric acid 20%		✓	
<b>Alkali</b>			
Sodium Hydroxide 70%	✓		
Ammonia 10%		✓	
<b>Solvent</b>			
Oil	✓		
Petrol	✓		
Diesel		✓	
Hydraulic oil	✓		
Butanol		✓	
Acetone		□	✓

Excellent : No change in the product

Good : No change in the product after 1 month contact, or some change after long term contact.

Limited : Will resist for 2 -3 hours before irreversible damage will occur.

### Safety Precaution and Clean-up

**Safety :** Read and follow the material safety data sheet (MSDS) before use. Employ normal safety precaution. Put on necessary personal protection equipment when handle and use this product.

**Ventilation :** when working in a confine workplace, thorough air ventilation must be used during and after application until the coating is cured. The ventilation system should be effective to prevent solvent vapour concentration from reaching lower explosion limit for the

product and to ensure exposure limit to the personnel to be below permissible exposure limit.

**Caution :** All electrical equipment and installations should be made and properly grounded. In area where explosion hazard exist, workmen should be used non-ferrous tools, conductive and non-sparking shoes.

**Clean-up :** Use acetone or MIBK for cleaning. Observe safety precaution when use the solvents. In case of spillage, absorb and dispose the material and used container according to local required regulation or through licence waste collector.

### Disclaimer

Data, specifications, directions and recommendations given in this data sheet represent test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use is not guaranteed and must be determined by user. The products are delivered and any technical assistance is given subject to our GENERAL CONDITIONS OF SALE, DELIVERY AND SERVICE and ,unless otherwise expressly agreed in writing ,manufacturer and seller assume no liability in excess of that stated therein for results obtained, injury, direct or consequential damage incurred from the use as recommended above or otherwise.

Product data are subject to change without notice and automatically void two years from issue.

### Limited Warranty

Whilst we endeavour to ensure that all advice we give about this product is correct and manufacture according to standard quality control system, however we have no control over either the quality or condition of the substrate or many other factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage arising out of the use of this product.