a.b.e.® Construction Chemicals

abe.®cote 320

EPOXY ENAMEL COATING

DESCRIPTION

abe.®cote 320 is a two-component, solvent-borne, pigmented polyamide-cured epoxy coating.

USES

abe.®cote 320 is a decorative and protective coating for most surfaces not exposed to extensive sunlight.

ADVANTAGES

- **abe.®cote 320** provides an economical hard finish, which offers surfaces improved abrasion resistance and aesthetic finish.
- Suitable for walls and containment areas free of extensive sunlight. Excellent for resistance to sugar, solvents, salt spray, several chemicals.

PROPERTIES OF WET MATERIAL	
Mixing ratio base: activator	2 :1 v/v
Density (typical)	1,22Kg/L for white
Colour: Base Activator Mixed material	Pigmented Clear White Dark Green Med Sea Grey Pale Grey Dove Grey Clear Other colours on application
Finish	Gloss
Flash point	17°C
Dilution (up to 5% by volume)	With **abe.®cote thinners no 3**
Consistency	Medium viscosity liquid

PROPERTIES DURING APPLICATION	
Pot life @ 25°C	8 hours/5L
Induction period	Allow to stand for 20 min in mixing shade after
Volume solids (typical)	49%
Drying time @ 25°C	Touch: 2 hrs Hard: 12 hrs Full cure: 7 days
Overcoating time @ 25°C	Minimum:12 hrs Maximum: 48 hrs
Application temperature range	10°C to 40°C
Do not apply coating if humidity is in excess of 85%@ 21°C or 75% @ 10°C	
Do not apply coating if the substrate temperature is at least 3°C (5°C is better) above dew point	
Induction time	20 minutes
Fire resistance of wet film	Flammable

PROPERTIES OF DRY FILM	
Max service temperature	Dry: 120°C Immersion: 70°C
Flexibility on conical mandrel	Passes
Hardness	200 gm (Sheen scratch test)
Salt spray	Withstands 1 000 hours when suitably primed
Weathering resistance	Chalks on prolonged exposure to sunlight
Toxicity	Cured film is non-toxic
Water tainting	No tainting in potable water
Distilled water resistance	Poor
Water resistance	Good
Solvent resistance	Resists aliphatic hydrocarbons and mineral oils
Chemical resistance	Resists 40% sodium hydroxide (caustic soda) and dilute mineral acids

a.b.e.® is an ISO 9001:2008 registered company
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SURFACE PREPARATION

Steel shall be grit blasted to a minimum standard of Sa 2 ½ on the Swedish Code of Practice SIS 055900.

Concrete shall be free of all laitance and preferably should be lightly vacuum blast cleaned. All blemishes in the surface such as pop-outs, omegas, blowholes and honeycomb should be patched with **epidermix 318**. This should be left overnight to cure and shall then be rendered smooth. If the surface is very irregular, consideration should be given to the use of **abe.®prime SL**, a solvent free epoxy self leveling primer.

BONDING/PRIMING

abe.®cote 320 is normally only applied over previously primed and undercoated surfaces. Metals would normally be primed with **abe.®cote 384**, and porous surfaces with **abe.®cote 386**. Any contamination on a primed surface must be removed before applying **abe.®cote 320**. A wash down with **abe.®cote thinners no. 3** will probably be sufficient. If optimum appearance is desired, the primer film should be over coated with **abe.®cote 386** and when dry, this should be sanded down to achieve a smooth base. Any debris of preparation must be removed before coating commences.

MIXING

Stir the contents of each container, particularly the base, very well. Add activator to base and stir together for at least five minutes using a flat paddle. It has been found that mechanical mixing gives better dispersion than manual mixing. A suitable mixing method would be a slow-speed electric drill (approximately 200 r/min) fitted with a paddle. If only part of a kit is to be used, add one volume of activator to two volumes of base. Measuring must be accurate and separate stirrers and containers used for proportioning each component. The mixed material must be left to stand in a cool place for 20 minutes prior to application.

Beware high summer temperature and overfast mixing causing extremely fast curing. Very low winter temperatures retard/stop curing.

COVERAGE

Recommended av. dft per coat	37.5 µm
Theoretical coverage for above dft	13 m^2/L on smooth surfaces
Wet film thickness at above	75 µm
Maximum recommended wft	100 µm
Practical coverage for estimating purposes	8 m^2/L/coat (depending on surface texture)
Recommended number of coats	2 coats for optimum appearance

(1) In order to avoid colour variation in large expanses, one must ensure that the same batch is used, since slight color variation from batch to batch is unavoidable (factory batching available on request).

(2) The substrate must be dry before application. For concrete, moisture content tests must be conducted prior to application of the priming system.

Maximum moisture content should be between 4-5%. (eg Protimeter Survey Master or equivalent), or Dynamic Calcium Chloride moisture "weight gain" over 24 hours, or (a practical overnight "plastic sheet test" is also advisable approx. 1m^2 masked down on surface).

(3) Concrete substrate must have a minimum tensile strength of 1.5N/mm^2

(4) Prevailing weather conditions must be taken into account otherwise surface defects can occur (see under "properties of wet material").

abe.®cote 320 may be applied by brush, short-fiber roller or airless spray. Spraying would be through a tip of approximately 250 µm. Stir frequently during use.

abe.®cote 320 should not be applied if the ambient temperature is below 10°C The curing reaction will not proceed at low temperature. If surfaces are not at least 3°C above the dew point, there is every chance that a film of condensed moisture may be present. This will upset adhesion of the coating.

Wet film thickness should not exceed the recommended figures as solvent entrapment could result. The same condition may be caused if overcoating times are shortened. Solvent entrapment in the film can lead to poor performance.

CLEANING

abe® super brush cleaner before setting.

PROTECTION ON COMPLETION

Protect the surface against traffic and spillage until cured. Most epoxies chalk and degrade in extensive sunlight.

MODEL SPECIFICATION

Two-component solvent borne epoxy enamel coating.

The coating will be **abe.®cote 320**, a two-component solvent-borne epoxy enamel coating applied in accordance with **a.b.e.® Construction Chemicals'** recommendations, including necessary primers as directed.

PACKAGING

abe.®cote 320 is supplied in 5L yield metal containers.

HANDLING & STORAGE

All **abe.®cote 320** related products have a shelf life of 12 months if kept in a dry, cool store in the original, unopened packs.

If stored at high temperatures and/or high humidity conditions, the shelf life may be reduced.

HEALTH & SAFETY

Wet **abe.®cote 320** is toxic and flammable. Always ventilate a working area very well during application and drying. Avoid naked flames in the vicinity.

Avoid inhalation of fumes/dust and contact with skin and eyes. Suitable protective clothing, gloves, eye protection and respiratory protective equipment should be worn. The use of barrier creams provides additional skin protection. If contact with skin occurs, wash with water and soap. Splashes into eyes should be washed immediately with plenty of clean water and medical advice sought.

Cured **abe.®cote 320** is inert and harmless. Separate Material Safety Data for base and activator is available on request.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.® Construction Chemicals** endeavors to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot - because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied - accept any liability either directly or indirectly arising from the use of **a.b.e.®** products, whether or not in accordance with any advice, specification, recommendation, or information given by the company.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements. **a.b.e.® Construction Chemicals** has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in flooring and concrete technology.

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