

abecote WD 337

Water-dispersed epoxy emulsion
paint smooth finish

DESCRIPTION

abecote WD 337 is a two-component, solvent-free, water-dispersed, polyamide-cured epoxy.

USES

abecote WD 337 is a protective, decorative and oil-resistant coating for: cementitious, masonry and asphaltic surfaces, floor coatings, as a concrete curing membrane, and primer for **abeflo**.

AREAS OF APPLICATION

Areas where **abecote WD 337** may be used on both floors and walls are:

- factories and warehouses
- parking facilities
- shopping areas
- dairies and milking parlours
- nuclear decontaminable areas

Non-skid surfaces:

A 50g container of fine aggregate is available on request. Mix well into 5 liters of **mixed** base and activator and apply as the final coat.

FEATURES & BENEFITS

- May be applied to damp surfaces.
- Easily overcoated at any time for maintenance.
- Tough protective and decorative coating.
- Oil resistant.
- Petrol resistant.
- Economical.

| PROPERTIES OF WET MATERIAL | |
|----------------------------------------|--------------------------------------------|
| Mixing ratio | 1 : 1 by volume |
| Relative Density (typical) | 1,17 |
| Colour : Base Activator Mixed | Coloured Translucent yellow Coloured |
| Finish | Semi-matt |
| Flash point | None |
| Dilution | Up to 10 - 15% water in first coat |
| Consistency | Low viscosity liquid |

| PROPERTIES DURING APPLICATION | |
|-------------------------------------|---------------------------------------------------------------------------|
| Pot life @20° C @ 30° C | 90 min/5l 45 min/5l |
| Volume solids (typical) | 40% - varies slightly according to colour |
| Coverage for above dft | 8 - 10m ² / l on smooth surface |
| Wet film thickness at above | 100 µm |
| Recommended no. of coats | Two minimum |
| Drying time @ 25° C | Touch dry – 4 - 6 hrs Hard dry - 24 hrs Full cure – 3 days |
| Overcoating time @ 25° C | Minimum 4 - 6 hrs Maximum – None |
| Application temperature range | +5° C to +35° C |
| Fire resistance of wet film | Non-flammable |

| PROPERTIES OF DRY FILM | |
|-----------------------------------|--------------------------------------------------------------|
| Maximum service temperature | Dry – +60° C |
| Minimum service temperature | Suitable for cold room use |
| Adhesion | Concrete substrate failed 3,7 MPa under tensile stress |
| Bond strength | Passes cross hatch test – 2 mm wide cuts |
| Impact resistance | Five impacts of 1 kg dropped 2 m |

| CHEMICAL PROPERTIES OF DRY FILM | |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sulphur resistance | No change after 21 days in 1% by mass sodium sulphate |
| Weathering resistance | Chalks on exposure to ultra-violet light or sunlight |
| Water resistance | Withstands 18 months immersion test but is not recommended for continuous immersion service |
| Solvent resistance | Withstands petrol, mineral and crude oils, 50% ethyl alcohol – 12 months immersion test but is not recommended for continuous immersion service |

Revision 9203



abe is an ISO 9002 Registered Company.

Technical data sheet

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CHEMICAL PROPERTIES OF DRY FILM

| | |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Chemical resistance | Withstands 40% caustic soda, 5 % lactic acid, 5 % acetic acid, vegetable and animal fats. Not recommended for continuous conditions |
| Scrub resistance | 39 000 cycles under 1,5 kg load over 2 500 mm ² area using a 2,5% synthetic detergent solution at ambient temperature – no failure |
| Nuclear decontamination | Details available on request |

SURFACE PREPARATION

CONCRETE – Surfaces must be clean and mechanically sound and free of laitance, nibs, dust, grease and oil. Wet abrasive or water blasting is the preferred method of surface preparation.

Surface preparation:

The substrate must be dry before application

Electronic moisture content tests must be conducted prior to application of the priming system. Maximum moisture 4-5% max. (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. 1m² masked down on surface).

Grinding may also be used on concrete floors.

As a last resort, hydrochloric acid etching may be done but the advice of **abe's** Technical Service Department must be sought to obtain an appropriate specification.

Any holes should be filled with an adequate mortar, e.g. sand/cement gauged with **duralatex** and laid into a **duralatex**/cement/sand slush.

Surfaces do not need to be dry as long as they are free of standing water.

Bone-dry surfaces must in fact be lightly dampened with water to prevent too rapid suction of water from the coating.

BONDING / PRIMING

It is not usual to apply a primer under **abecote WD 337**. On porous surfaces dilute the first coat with up to 10 - 15% clean water and pre-dampen the surface to obviate suction.

MIXING

Pre-stir base and activator. Add the entire base to the activator and stir for at least 5 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.

POT LIFE

Mixed **abecote WD 337** has a pot life of some 90 minutes at 20° C. While unused material may still appear workable after this time, it must under no circumstances be used.

COVERAGE

8 - 10m² / litre on smooth surface.

APPLICATION

Mixed **abecote WD 337** may be applied to the dampened substrate by water pre-moistened brush or roller or by airless spray using a ± 500 µm tip. Ideally any first coat should be applied by brush. As soon as a coat is touch dry, a subsequent coat may be applied.

Unless the treatment is required to provide chemical resistance, two coats are normally sufficient. Chemical resistant work or floors always requires three coats.

Drying time will depend upon temperature, humidity and ventilation. If working indoors or in confined spaces, ensure adequate ventilation. Outdoors, the wet film is liable to wash off in rain or be damaged by frost.

abecote WD 337 may be overcoated at any time. Ensure that the surface is clean and free of contamination and chalking. Overcoating, without intercoat adhesion problems, may be carried out with **abecote WD 337** itself or solvent-borne or solvent-free epoxies or other compatible coatings.

USE AS A CONCRETE MEMBRANE

abecote WD 337 can be applied to green concrete as a curing membrane, after which it becomes a protective and decorative coating.

In this application it acts as protection during subsequent construction, this also applies to floors. When final decoration and protection of the surface is due for application, the surface need only be suitably cleaned and repaired to take whatever final treatment may be specified. Consult **abe's** Technical Division for advice.

CLEANING

During brief interruptions of work, equipment should be immersed in clean water. At major stoppages it must be washed with soap and water or with **abe super brush cleaner**. Cured **abecote WD 337** is almost impossible to remove.

PROTECTION ON COMPLETION

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

MODEL SPECIFICATION

Two component solvent-free water dispersed epoxy coating.

The coating will be **abecote WD 337**, a two-component solvent-free water dispersed epoxy coating applied in accordance with **abe Construction Chemicals'** recommendations.

PACKAGING

abecote WD 337 is supplied in 5 litre yield metal containers.

HANDLING & STORAGE

All **abecote WD 337** related products have a shelf life of 24 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.

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HEALTH & SAFETY

When wet **abecote WD 337** is toxic. Ensure working area is well ventilated during application and drying. Avoid inhalation of 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.

When cured **abecote WD 337** is inert and harmless.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **abe Construction Chemicals** endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot - because **abe** has no direct or continuous control over where and how **abe** products are applied - accept any liability either directly or indirectly arising from the use of **abe** 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. **abe Construction Chemicals** has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in building and construction technology.

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