



MAINCOTE™ AF-400 DS Acrylic Emulsion

For High Performance concrete 1k flooring Applications

Regional Product Availability

EMEA

Product Description

MAINCOTE™ AF-400 DS Acrylic Emulsion was designed to realize 1K WB floor paints with very good film performance for light duty flooring. It offers good and quick adhesion on concrete, fast drying time, and hot tire pickup resistance.

Application

MAINCOTE™ AF-400 DS Acrylic Emulsion is designed for 1K WB floor clear and pigmented coatings applications. Formulations based on this polymer could be matt, semi-gloss or high gloss and are suggested for domestic garages and balconies.

Typical Properties

These are typical properties, not to be construed as specifications and are formulation dependant

Property	Typical Values
Appearance	Milky dispersion
Solids content	41.0-43.0%
pH	8.50-9.50
Brookfield LV Viscosity (spindle 3,60 rpm)	<4000 mPas
Minimum Film Formation Temperature	42-45°C
Specific Gravity (wet polymer)	1.03
Storage precautions	Protect from freezing

Features

- MIT free
- Exceptional adhesion to concrete
- VOC* formulations < 100g/L
- Paint formulations with good hot tire and chemical resistances
- Fast drying

* VOC substances are not intentionally added and are not knowingly introduced from another raw material.

Formulation Guidelines

MAINCOTE™ AF-400 DS Acrylic Emulsion is versatile binder and could be formulated with a large range of raw materials. We recommend to use some hydrophobic dispersing agents (like OROTAN™ 681 and OROTAN™ 165 Dispersants) during the grinding step to guarantee the best chemical and humidity resistances.

Because of the high MFFT, coalescent level should be equal to 20-25 % dry polymer (for paint MFFT < 5°C). We recommend to associate low boiling point coalescing agent with heavy ones to have an equilibrium between hardness and flexibility. Typical coalescing agents are DOWANOL™ PnB, DOWANOL™ DPM, DOWANOL™ DPnB associate with UCAR™ Filmer IBT, Optifilm 300 or Optifilm 400.

Starting point formulations available on demands.

Typical Properties

Paint formulations based on MAINCOTE™ AF-400 DS Acrylic Emulsion could be applied by brush or roller, the fast-drying permits to apply 2 layers on the same day (usual conditions 20-23°C and relative humidity 60%).

Formulations could be tinted, we recommend to use more mineral pigments for durability and weatherability. If tinting pastes are used, compatibility tests should be controlled first.

Paint formulations based on MAINCOTE™ AF-400 DS Acrylic Emulsion show good hot tire resistance, chemical resistances (against gazole, white spirit, brake fluid, soda, and mineral acids).

These properties are typical but do not constitute specifications

HG white pigmented formulation / Typical Properties		
	First coat	Second coat
Drying time – 23°C- 60 % RH 200µ per coat	25 min	45 min
Taber abrasion – CS10- 1000 g per wheel – 1000 cycles 2 coats of 200 g/m2	86 mg	

HG white pigmented formulation	MAINCOTE™ AF-400 DS 1K pigmented floor coating	Commercial 1K Garage floor coating
Hot Mark	7	6
Compression	10	10
Material Left on Tire	10	9

New concrete must cure for a minimum of 30 days prior to application.

Handling Precautions Before using this product, consult the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

Storage Store products in tightly closed original containers at temperatures recommended on the product label.

Disposal Considerations Dispose in accordance with all, local or national regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local or national regulations. Contact your Dow Coating Materials Technical Representative for more information.

Chemical Registration Many countries within EMEA1 require the registration of chemicals, either imported or produced locally, prior to their commercial use. Violation of these regulations may lead to substantial penalties imposed upon the user, the importer or manufacturer, and/or cessation of supply. It is in your interests to ensure that all chemicals used by you are registered. Dow does not supply unregistered products unless permitted under limited sampling procedures as a precursor to registration.

Note on EMEA1 Product Line Product availability and grades vary throughout the countries in the EMEA1 area. Please contact your local Dow Coating Materials representative for further information and samples.

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