



## **PRIMAL™ AC-412M Acrylic Polymer**

Containing the AVANSE™ Technology

### **Regional Product Availability**

Europe

### **Description**

PRIMAL™ AC-412M is a versatile pure acrylic polymer for interior and exterior paints.

The product is based on Dow AVANSE™ Technology. Through the interaction of the binder with the pigments and extenders, a more uniform distribution of the different particles in the paint is achieved leading to superior coatings performance, especially in opacity, scrub and stain resistance. PRIMAL™ AC-412M has been designed for the formulation of environmentally friendly, low odour, interior and exterior wall paints. It has exceptional pigment binding capacity which permits formulation of flat wall paints at high pigment volume concentration while maintaining good scrub resistance. Thus PRIMAL™ AC-412M can be formulated more economically in solvent-free flat paints compared to competitive technologies.

Paints based on PRIMAL™ AC-412M exhibit excellent colour acceptance (rub test) thanks to its enhanced pigment dispersion, this further distinguishes this binder from other solvent-free products and allows the formulation of superior quality coatings.

In addition, PRIMAL™ AC-412M allows the manufacture of interior sheen paints with very good water and stain resistance. PRIMAL™ AC-412M is very well suited for exterior applications (masonry primer and top coat) due to its pure acrylic composition combined with its strong association with minerals. According to our exposure monitoring, coatings based on PRIMAL™ AC-412M exhibit excellent efflorescence resistance.

PRIMAL™ AC-412M can also be used as low build stains on wood which makes this binder very versatile.

## Characteristics of the Product

- High pigment binding capacity affording economical interior wall paints
- Excellent mechanical stability under high shear conditions
- Excellent scrub resistance
- Enhanced opacity
- Pure acrylic exterior durability

## Environmental Properties

- Film formation without the need for coalescent, plasticizer or other solvents
- Formaldehyde-free\*
- Alkyl phenol ethoxylate-free\*
- Very low residual monomer and VOC levels
- Very low odour

\* Formaldehyde and APEO are not intentionally added and are not knowingly introduced from another raw material.

## Typical Physical Properties

The properties are typical but do not constitute specifications.

Property	Typical Values
Appearance	Milky white liquid
Solids content	49.5 – 50.5 %
pH	8.5 – 9.2 %
Brookfield LV Viscosity (Spindle 3, 60 rpm)	< 500 mPa.s
Minimum Film Formation Temperature	~5°C
Specific gravity (wet polymer)	1.05 g/cm <sup>3</sup>
Specific gravity (dry polymer)	1.13 g/cm <sup>3</sup>

<b>Handling Precautions</b>	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.
<b>Storage</b>	Store products in tightly closed original containers at temperatures recommended on the product label.
<b>Disposal Considerations</b>	<p>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.</p> <p>It is the user's responsibility to verify that treatment and disposal procedures comply with local, state or national regulations. Contact your Dow Coating Materials Technical Representative for more information.</p>
<b>Chemical Registration</b>	Many countries within EMEA 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.
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