

**MAINCOTE™ AE-610 DS Acrylic Emulsion Crosslinker**  
For Acrylic/Epoxy Coatings**Regional Product Availability**

EMEAI

**Product Description**

MAINCOTE™ AE-610 DS Acrylic Emulsion Crosslinker is an innovative water-borne acrylic polymer emulsion designed for use in 2K epoxy linking coatings for coatings over concrete surfaces to provide good chemical resistance and excellent UV durability when cross linked with epoxy linking coatings.

**Application**

When combining MAINCOTE™ AE-610 DS Acrylic Emulsion Crosslinker with water-borne liquid epoxy dispersion in either an 80/20 or 90/10 ratio (by weight – commercial form), the optimum combination of good sanding ability with sufficient flexibility can be achieved to formulate 2K WB metal and concrete coatings.

**Typical Properties**

These are typical properties, not to be construed as specifications

Property	Typical Values
Appearance	Milky dispersion
Solids content	42.0-43.0%
pH	7.00-8.00
Brookfield LV Viscosity (spindle 3,60 rpm)	500-1500 mPas
Minimum Film Formation Temperature	42-45°C
Specific Gravity (wet polymer)	1.03
Storage precautions	Protect from freezing

**Features**

- APEO and formaldehyde generator free\*
- MIT free
- Exceptional adhesion to a variety of substrates
- Low VOC\*\* formulations < 100g/L, low odor compared to 2k WB epoxy
- Good wet-on-wet performance
- Excellent corrosion resistance properties
- Good flexibility

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

\*\* VOC: Amount in g/L of organic compounds having an initial boiling point less than or equal to 250°C measured at a standard pressure of 101.3 kPa.

## Formulation Guidelines

### Coalescent and Co-Solvent Effects

The type and level of coalescent and co-solvent in a formulation can be critical to the balance of properties obtained, in particularly for the early film properties. Water-soluble coalescents such as Butyl CELLOSOLVE™ or Butyl CARBITOL™ are generally not suggested as the sole coalescent for direct-to-metal maintenance paints, because they do not develop rapid corrosion resistance; in particularly early rust resistance.

The addition of WB liquid epoxy dispersion to MAINCOTE™ AE-610 DS Acrylic Emulsion Crosslinker will decrease the MFFT of the formulation; therefore, a level of 5% coalescent is enough to have good film formation for a 2 component system. For primer applications, DOWANOL™ PM (grind step) + DOWANOL™ PPh or DOWANOL™ PM + Texanol were used successfully. For undercoat applications, a quicker coalescing agent like DOWANOL™ PnB is suggested.

### Formulation recommendations

#### Extenders package

Talc (5% PVC), mica, which can also be combined with Zn stearate.

#### Dispersing agent

1.5% (weight/weight polymer dry) OROTAN™ 165 (OROTAN™ 681 could be another option).

#### Defoamers

Byk range (023 in the grind and 024 in the let-down step if needed).

#### Thickeners

Nonionic urethane thickeners, such as ACRY SOL™ RM-2020NPR, ACRY SOL™ RM-8W and ACRY SOL™ RM-12W are a must to maintain good corrosion resistance. ACRY SOL™ RM-2020NPR is suggested for brushing/roller applications. ACRY SOL™ RM-8W and ACRY SOL™ RM-12W, which give a lower high shear viscosity, are more suitable for airless spray formulations.

The application by spray is suggested 10-15 minutes after the mixing of the two components.

**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 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.

**Note on EMEA Product Line**

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

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