



## PRIMAL™ 2133 Emulsion

For Priming, Sealing and Masonry Glaze Applications

### Regional Product Availability

- Asia-Pacific

### Description

PRIMAL™ 2133 Emulsion is a small particle size, hard acrylic-styrene polymer emulsion that facilitates the formulation of sealers and primers for concrete surfaces.

When properly formulated, sealers made with PRIMAL 2133 Emulsion offer excellent adhesion to a variety of concrete substrates, including old concrete floors which retain embedded oil and dirt. Its hard polymer composition extends its application as abrasion resistant topcoats for floors.

### Key Features

- Small particle size, good penetration into masonry substrates.
- Facilitates the formulation of fast drying sealers.
- Excellent adhesion to concrete surfaces.
- Excellent response to rheology modifiers.

### Benefits

- Excellent adhesion to chalky surfaces, lightly soiled concrete, masonry and vinyl tiles.
- Good resistance to abrasion, water, detergents, oils and alkalis.
- Offers rapid hardness development.
- Offers a water-based alternative to solvent-borne acrylics as primers for high build elastomeric wall and roof coatings.

### Typical Physical Properties

(These properties are typical but do not constitute specifications)

Property	Typical Values
Appearance	Opaque, white to yellow liquid
Solids, by weight, %	41.5
Solids, by volume, %	40.0
Density, wet, (g/ml)	1.03
Density, dry, (g/ml)	1.08
pH	7.4
Minimum Film Formation Temperature (± 2°C)	52
Glass Transition Temperature (± 2°C)	56
Viscosity (Brookfield LV #3, 60 rpm, 25°C), cps	< 1000
Storage precautions	Protect from freezing

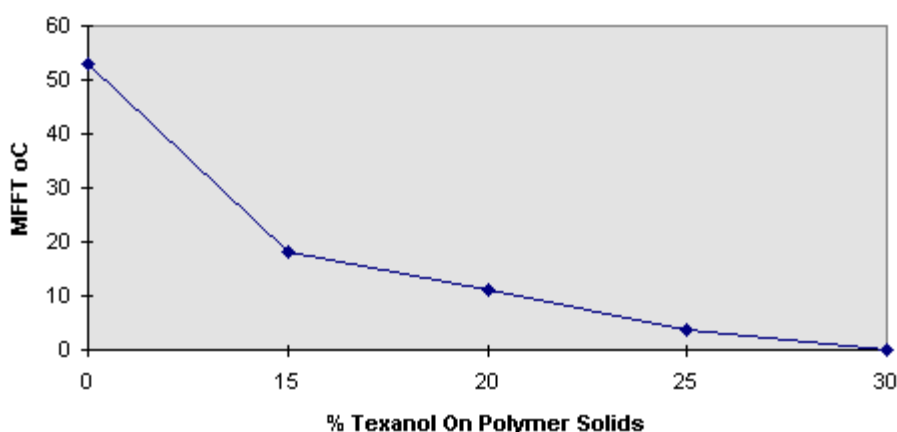


## Formulation Guidelines

PRIMAL™ 2133 Emulsion is designed as a very hard, thermoplastic polymer and its intended applications, e.g. concrete sealers, plastic coatings, general industrial finishes, etc, require this property.

A consequence of this is that, being an emulsion polymer, PRIMAL 2133 Emulsion has a very high coalescent requirement at ambient cure conditions. This aspect is frequently underestimated by new formulators of this product. The graph below illustrates the point, comparing the minimum film forming temperature (MFFT) of PRIMAL 2133 Emulsion versus increasing levels of Texanol coalescent.

**MFFT of PRIMAL 2133 Emulsion / Texanol coalescent Blends**



Formulators should note Texanol coalescent is a slow coalescent - it remains in the polymer film for extended periods and decreases the early tack resistance and block resistance of coatings. Other coalescents, particularly glycol ethers, are generally faster to evaporate. However, these glycol ether coalescents tend to be less efficient than Texanol coalescent and hence need to be added at even higher levels.

## 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

Dispose in accordance with all local, state (provincial) and federal 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, state (provincial) and federal regulations. Contact your Dow Coating Materials Technical Representative for more information.

## Chemical Registration

Many countries within the Asia-Pacific 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 Asia-Pacific Product Line

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

## Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

## Customer Notice

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