



## ACRYSOL™ DR-110 Rheology Modifier

Hydrophobically modified, alkali-soluble, emulsion-form thickener for latex coatings.

### Description

ACRYSOL™ DR-110 Rheology Modifier is effective at building viscosity in a wide range of water-borne coatings formulations, from flat to semigloss. It offers application and feel properties to coatings that is very similar to those of hydroxyethylcellulose thickeners, particularly the hydrophobically-modified type. Thus, it can provide a very cost-effective alternative to these cellulosic thickeners.

ACRYSOL DR-110 Rheology Modifier is a synthetic, liquid thickener based on anionic, acrylic chemistry. ACRYSOL DR-110 Rheology Modifier is easy to handle and incorporate and does not itself support the growth of mildew. It can be incorporated into the mill base, before or after addition of pigments and extenders, to give sufficient viscosity for good grinding efficiency. Alternatively, ACRYSOL DR-110 Rheology Modifier can be added during the let down stage of a coating's manufacture.

### Key Features

- High sag resistance
- Low roller spatter
- Excellent thickening efficiency
- Excellent color acceptance and low color float
- Appealing in-can structure
- Provided as low-viscosity liquid
- Manufactured without the use of solvent or APEO surfactants

### Benefits

- Lower formulation cost than cellulosic thickeners
- Excellent brush and roller loading and transfer
- Excellent long-term viscosity stability
- Good film-build for good hiding

### Typical Properties

These properties are typical but do not constitute specifications.

Property	Typical Values
Appearance	Milky white emulsion
Solids, by weight, (%)	30.0
Density (g/ml) wet	1.06
Bulking Value (lbs/gal) wet	8.85
pH	4.5
Viscosity (Brookfield #3, 60 rpm), (cps)	30
Chemical Type	Anionic HASE
Storage Precautions	Protect from freezing

## Formulation Guidelines

Since ACRY SOL™ DR-110 Rheology Modifier is an alkali-soluble emulsion, it requires pH between 8 and 10 for efficient thickening. At the mill base stage, if extenders such as calcium carbonate are present, the alkaline nature of the mill base is typically sufficient to allow ACRY SOL DR-110 Rheology Modifier to give a mill base viscosity high enough for good dispersion without the need for additional base. However, after the dispersion is completed, if necessary, addition of a base is suggested to raise the pH to between pH 8 and 10. If incorporating ACRY SOL DR-110 Rheology Modifier in the letdown stage, diluting it with water 1:1 prior to addition is recommended. The letdown should also be adjusted to be between pH 8 and 10 with the addition of additional base as needed. ACRY SOL DR-110 Rheology Modifier is supplied as a low viscosity liquid that is easy to pour and pump. It is especially attractive to use when bulk handling and automatic metering equipment are employed.

## 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, 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.

## Product Stewardship

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## Customer Notice

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ACRY SOL™ DR-110 Rheology Modifier/ Dow Coating Materials

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