



ACRYSOL™ DR-180 Rheology Modifier

Primary or Co-thickener for Waterborne Paints

Regional Product Availability

- Asia-Pacific

Description

ACRYSOL™ DR-180 Rheology Modifier is a hydrophobically modified, alkali-soluble, anionic associative thickener, designed to offer medium shear rate viscosity in interior/exterior paints. ACRYSOL DR-180 Rheology Modifier can be used as either a primary or co-thickener in water based coatings.

ACRYSOL DR-180 Rheology Modifier facilitates the formulation of paints with excellent thickening efficiency, a very good heat-aging stability, washability, color acceptance and low foaming in roller applications. ACRYSOL DR-180 Rheology Modifier offers the potential to improve hiding in the manufacture of some paints.

Paints formulated with ACRYSOL DR-180 Rheology Modifier as a sole thickener offers improved flow and leveling over that of cellulosic thickeners, and lower raw material cost compared to cellulosic thickeners. Delivered as a low viscosity liquid, ACRYSOL DR-180 Rheology Modifier offers ease and handling and incorporation during paint manufacture. It is resistant to microbiological degradation, and offers resistance to viscosity loss in the paint, a common problem encountered by paint manufacturers. ACRYSOL DR-180 Rheology Modifier is APEO-free⁽¹⁾ and contains no added formaldehyde or formaldehyde generators⁽²⁾.

Key Features and Benefits

- Excellent thickening efficiency.
- Cost effective.
- Facilitates improved hiding for high quality paints.
- Low foaming in roller applications.
- Excellent flow and leveling.
- Excellent spattering resistance.
- Excellent resistance to microbial attack.
- Easy to handle and incorporate into formulations
- APEO-free⁽¹⁾ and no added formaldehyde or formaldehyde generators⁽²⁾.

(1) Manufactured without the use of Alkyl Phenyl Ethoxylate (APEO) surfactants.

(2) Formaldehyde is a ubiquitous material in our environment. Currently there is no accepted regulatory or industry definition of "Formaldehyde-Free." Therefore, we purposely refrain from using the term "Formaldehyde-Free." However, for ACRYSOL™ DR-180 Rheology Modifier we do not intentionally add Formaldehyde or Formaldehyde generators.

**Typical Properties**

(The following properties are typical but do not constitute specifications).

Property	Typical Values
Appearance	Opaque, white to off-white liquid
Solids, by weight, %	35.0
Density, wet, (g/ml)	1.06
pH	3.5
Viscosity (Brookfield LV #1, 60 rpm, 25 °C), cps	< 100
Stabilization	Anionic
Solvent	Water
Storage precautions	Protect from freezing

Application Method

- 1) Adjust pH of paint to at least pH 8.0.
- 2) Slowly add diluted ACRY SOL™ DR-180 Rheology Modifier. Recommended to dilute with at least 50% water.
- 3) Ensure adequate agitation, and adjust the final pH to at least pH 8.0.
- 4) Add sufficient ACRY SOL DR-180 Rheology Modifier to achieve the desired viscosity.

**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 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

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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