

# **RHOPLEX® AC-347LO**

100% Acrylic Vehicle for Interior and Exterior Satin to Semigloss Paints

#### **Description**

Rhoplex® AC-347LO is a low ammonia odor, 100% acrylic vehicle that was developed for use in interior and exterior satin to semigloss paints. Rhoplex AC-347LO provides paint formulators with an opportunity to achieve excellent adhesion and abrasion resistance, along with very good flow, leveling, and gloss. While Rhoplex AC-347LO was designed specifically as a paint vehicle for semigloss enamels, it can also be used for paints across a broad PVC range. Rhoplex AC-347LO also has shown excellent durability on our test fences at Spring House, PA.

Benefits of Paints Based on RHOPLEX® AC-347LO

Applications and Appearance	Performance
Very good gloss potential	Exterior and Interior applications
Alkyd-like application properties	Excellent adhesion to previously painted substrates, including gloss alkyd
Very good flow and leveling	Excellent abrasive scrub resistance
Good Hiding	Robust Formulation Versatility

Typical and Physical Properties (These properties are typical but do not constitute specifications).

Property	Typical Values
Appearance	Milky-white liquid
Solids Content, %	50
Brookfield Viscosity, cps (25°C)	250
рН	7.7-8.3
Denisty, lb/US gal	8.82
Bulking Value of dry solids, US gal/lb	0.106
Wet bulking value, US gal.lb	0.112

## Formulation Guidelines

#### **Dispersants and Thickeners**

The type and level of pigment dispersant plays an important role in attaining a desirable balance of rheology, gloss, and stability in a paint formulation

In formulations using HEUR thickeners, such as ACRYSOL™ RM-3000, RM-5000, RM-995, etc., Tamol® 165A dispersant at 0.85% (active ingredient) gives the best overall properties. Tamol® 731A is a good alternative.

In formulations using HASE thickeners such as ACRYSOL™ DR-5500, DR-6000, etc., Tamol® 1124 or Tamol® 165A at a level of 1% (active ingredient) is recommended for good gloss, flow and lower cost.

#### **Pigments**

Rhoplex® AC-347LO provides flexibility to use in a variety of pigments, whether dry or slurry. It can also be used successfully with Ropaque® Ultra or Ultra EF opaque polymer, to enable the formulator to maintain properties and realize cost savings.

#### Coalescents

UCAR® Film Former IBT is the coalescent recommended for use with Rhoplex® AC-347LO. For exterior applications, formulators should coalesce at a level of 10% on latex binder solids to ensure excellent durability. In interior applications, lower levels of UCAR ® Film Former IBT (in the range of 6%) can be used. However, the film formation properties of paints containing low levels of coalescent should be tested before use under adverse conditions. Other coalescents such as Dowanol® DPnB or Texanol can also be used.

It is also possible to replace some or all of the traditional, high VOC- containing coalescents with lower VOC containing coalescents (or plasiticers) like Optifilm ® 400 to formulate Rhoplex ® AC-347LO for low VOC paints.

#### **Preservatives**

An effective preservative for formulations based on Rhoplex® AC-347LO is Kathon® LX 1.5% microbiocide. Kathon® LX 1.5% protects the paint through the storage, transport, and end-use. The recommended level of additive is 25ppm or 1.65lbs/1000 lbs. of paint.

#### Mildew Protection

For exterior applications, the use of an effective paint film mildewcide is recommended.

### 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.

# Chemical Registration

Many countries 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. The Dow Chemical Company 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.

#### Contact:

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