



Technical Data Sheet

RHOPLEX™ AC-347 Acrylic Vehicle

For Interior and Exterior Semigloss Paints

Introduction

RHOPLEX™ AC-347 Acrylic Vehicle is 100% versatile, that was developed for use in interior and exterior semigloss paints. RHOPLEX™ AC-347 Acrylic Vehicle provides paint formulators with an opportunity to achieve excellent adhesion and abrasion resistance, along with very good flow and leveling, and gloss with both dry and slurry paints. RHOPLEX™ AC-347 Acrylic Vehicle was designed specifically as a paint vehicle for semigloss enamels. It can also be used for paints or other high adhesion applications and is suitable for quality exterior semigloss trim paints.

Benefits

Applications and Appearance

Very good gloss potential
Alkyd-like application properties

Very good flow and leveling
Good thickener efficiency
Good hiding

Performance

Exterior and interior applications
Excellent adhesion to previously painted substrates, including gloss alkyd
Very good stain resistance
Excellent scrub resistance
Formulation versatility

Typical Physical Properties¹

Property	Typical Values
Appearance	Milky White Liquid
Solids Content, %	50
Viscosity, Brookfield, cps (25°C) (#3 spindle, 60 rpm)	250
pH	9.0
Density, US lb/gal	8.82
Bulking Value, US gal/lb	
Dry Solids	0.106
Wet	0.112

1. These properties are typical but do not constitute specifications.

Formulation Guidelines

Dispersants

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

In formulations using HEUR thickeners such as ACRY SOL™ RM-2020 NPR Rheology Modifier as the primary thickener, TAMOL™ 165A Dispersant at 0.85% (active ingredient) gives the best overall properties. TAMOL™ 731A Dispersant is a good alternate.

In ACRY SOL™ RM-5 Rheology Modifier thickened formulations, TAMOL™ 1124 Dispersant or TAMOL™ 165A Dispersant at a level of 1% (active ingredient) is recommended for good gloss, flow and lower cost.

Pigments

RHOPLEX™ AC-347 Acrylic Vehicle provides flexibility to use in a variety of pigments whether dry or slurry. It can also be used successfully with ROPAQUE™ OP-96 Opaque Polymer, to enable the formulator to improve properties and realize cost savings.

Coalescents

Texanol ester alcohol is the coalescent recommended for use with RHOPLEX™ AC-347 Acrylic Vehicle. For exterior applications, formulators should use this product at a level of 10% on latex binder solids. In interior applications, lower levels of Texanol ester alcohol (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.

Preservatives

An effective preservative for formulations based on RHOPLEX™ AC-347 Acrylic Vehicle is KATHON™ LX 1.5% Microbiocide. KATHON™ LX 1.5% Microbiocide protects the paint through storage, transport and end-use. The recommended level of additive is 25ppm or 1.65lbs per 1000 lbs. paint.

Mildew Protection

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

Tinting Systems

Tinting systems such as the Nuodex 888 system from Huls can be satisfactorily used with RHOPLEX™ AC-347 Acrylic Vehicle.

Safe Handling Information

Based on the character of similar materials, this product is not expected to be toxic via single acute oral or dermal exposure. It may be a mild-to-moderate skin and eye irritant.

The Dow Chemical Company Material Safety Data Sheets (MSDS) contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Under OSHA Hazard Communication Standard, workers must have access to and understand MSDS on all hazardous substances to which they are exposed. Thus, it is important that you provide appropriate training and information to your employees and make sure they have available to them MSDS on any hazardous products in their workplace.

The Dow Chemical Company sends MSDS on non-OSHA-hazardous products to both the "bill-to" and "ship-to" locations of all our customers upon initial shipment (including samples) of all of our products (whether or not they are considered OSHA-hazardous). If you do not have access to one of these MSDS, please contact your Dow representative for an additional copy. Updated MSDS are sent on an annual basis to all customers of record.

MSDS should be obtained from your suppliers of other materials recommended in this bulletin.

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.

CAUTION! Keep combustible and/or flammable products and their vapors away from heat, sparks, flames and other sources of ignition including static discharge. Processing or operating at temperatures near or above product flashpoint may pose a fire hazard. Use appropriate grounding and bonding techniques to manage static discharge hazards.

CAUTION! Failure to maintain proper volume level when using immersion heaters can expose tank and solution to excessive heat resulting in a possible combustion hazard, particularly when plastic tanks are used.

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.

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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