



Technical Data Sheet

RHOPLEX™ CL-105 Emulsion

For Factory-Applied Sanding Sealers over Wood With Warmth, Clarity and Sandability

Introduction

RHOPLEX™ CL-105 Emulsion is designed for use in factory-applied, waterborne, acrylic wood finishes that require warmth, clarity, grain character and sandability. Sealers based on this emulsion have excellent sanding characteristics without the addition of stearates or other sanding aids.

Formulations based on RHOPLEX™ CL-105 Emulsion are clear from the moment they are applied due to their excellent wet film clarity. These formulations also dry very rapidly.

Clear lacquers based on RHOPLEX™ CL-105 Emulsion are formulated to have very low VOC and HAPS content, important advantages over solventborne lacquers.

Performance Advantages

- Outstanding clarity
- Excellent early sandability (without the use of stearates)
- Good warmth and grain definition
- Low VOC
- Low HAPS

Performance Properties

The following characteristics of lacquers based on RHOPLEX™ CL-105 Emulsion were determined in our laboratory using the recommended starting point formulations.

Fast Dry

At the recommended film thickness of 3 to 4 wet mils, Sanding Sealer Formulation CL-105-1 can be sanded after 20 minutes ambient drying followed by 4 minutes at 120°F and 5 minutes cooling. Normally sanding aids will not be necessary. However, the addition of Liquazinc AQ-90 dispersion (1% to 3% additive solids based on polymer solids) will improve sandability even further with an accompanying slight decrease in film clarity. The rate of hardness development always depends on the coalescent used.

Typical Physical Properties¹

Property	Typical Values
Appearance	White Translucent Liquid
Solids Content, % By Weight	37.0
By Volume	35.0
pH	7.0
Viscosity, cps	< 150
Density, US lb/gal Wet	8.7
Dry	9.3
VOC, as supplied	< 3 g/l, 0.03 lb/gal
Freeze / Thaw Stability	Protect from freezing
Mechanical Stability (5 min Waring Blender)	Passes
Heat Stability (10 days/140°F)	Passes

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

Safe Handling

Based on its composition, RHOPLEX™ CL-105 Emulsion is not expected to be toxic via single oral, dermal, or inhalation exposure. It may be a mild skin, eye, or respiratory 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 the 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 for all of its products, whether or not they are considered OSHA-hazardous, to the “bill to” and/or “ship to” locations of all its customers upon initial shipment, including samples. If you do not have access to one of these MSDS, please contact your local Dow representative for an additional copy. Updated MSDS are sent upon revision to all customers of record. In addition, MSDS are sent annually to all customers receiving products deemed hazardous under the Superfund Amendments and Reauthorization Act.

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

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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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