



Product Data Sheet

ROSHIELD™ 3275 Acrylic Emulsion

Waterborne Acrylic Polyol for Industrial Coatings

Introduction

ROSHIELD™ 3275 Acrylic Emulsion is a waterborne acrylic polyol specifically designed for reaction with water-dispersible polyisocyanates for wood coating applications where early hardness and sandability are important, under mild drying conditions. Unlike nitrocellulose lacquers, solventborne two-component (2K) polyurethanes, and solventborne acid catalyzed finishes, waterborne 2K polyurethane coatings based on this acrylic polyol have extremely low VOCs and very good early print resistance. In addition, films based on this emulsion are water-white and resistant to yellowing.

ROSHIELD™ 3275 Acrylic Emulsion cures under ambient conditions, but heat on-line is recommended for early pack-out. Applications for high performing 2K polyurethane coatings based on ROSHIELD™ 3275 Acrylic Emulsion include clear, pigmented and flatted systems for office and laboratory furniture, kitchen cabinets and fine furniture. It is also suitable for use in topcoats over primed metal.

Features & Benefits

- Excellent stain, chemical and solvent resistance
- Excellent clarity and appearance in clear wood coatings
- Fast curing speed, with excellent early print and block resistance
- Long pot life
- Excellent hardness and mar resistance
- Ability to be used in self-sealing systems

Typical Physical Properties

These properties are typical but do not constitute specifications.

Property	Typical Values
Appearance	White to off-white opaque liquid
Solids Content, %	42.0
pH	7.5
Viscosity, cP (#2 Spindle @30 rpm, 25°C)	< 1000 cP
Weight per U.S. Gallon (wet, lbs/gal)	8.85
Bulking Value (wet), gal/lbs	0.113
Bulking Value (dry), gal/lbs	0.102
MFFT (°C)	11
Equivalent Weight (as supplied, theoretical)	3100
Hydroxyl Number	43

Potential Applications

- Clear lacquers and pigmented coatings for wood furniture, cabinetry and joinery
- General Industrial Finishes for wood and metal

**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.

**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:

North America: 1-800-447-4369
Latin America: (+55)-11-5188-9000
Europe: (+800)-3-694-6367
Asia-Pacific: (+800)-7776-7776
<http://www.dow.com>

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