



## Technical Data Sheet

### **RHOPLEX™ WL-81 Emulsion**

Waterborne Acrylic Copolymer for Industrial Coatings

#### **Introduction**

RHOPLEX™ WL-81 Emulsion is specifically designed for the formulation of clear and pigmented ambient or forced-air-dry industrial lacquers. Coating systems based on this polymer are suitable for use on a variety of substrates and offer a number of key benefits currently provided by solventborne industrial lacquers, but without the flammability, odor, or other problems inherent with such systems

#### **Features & Benefits**

- Lacquer-like fast drying and rapid hardness development
- Excellent spray, dip coat and flow coat characteristics
- Excellent early water resistance
- Good exterior durability
- Excellent block and print resistance
- Good corrosion protection over ferrous metals
- Excellent humidity resistance
- Excellent water whitening resistance
- High gloss and image clarity
- Adhesion to substrates such as wood, metals (e.g., steel, aluminum) and some plastics
- Good chemical and solvent resistance in a one-component coating
- Self-thickening, sometimes eliminating the need for additional rheology modifiers
- Compatibility with water-reducible epoxy esters for improved resistance to corrosion

#### **Typical Physical Properties**

These properties are typical but do not constitute specifications.

Property	Typical Values
Appearance	Milky, White Liquid
Solids Content, %	41.5
pH	7.4–8.0
Viscosity, cP (#3 Spindle @ 60 rpm, 25°C)	< 300 cP
Weight per U.S. Gallon (Wet), lbs/gal	8.6
Bulking Value (Wet), gal/lbs	0.116
Bulking Value (Dry), gal/lbs	0.112
MFFT (°C)	57

#### **Potential Applications**

- General industrial finishes for wood, metal and plastic
- DIY clear varnishes for wood
- DIY lacquers for 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.

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