

AquaVue™ WTJ

W – Silicone Urethane Hybrid Emulsion

T – Roll Coat or Spray

J – Ambient or Low Bake

Product Data Sheet

Silicone Urethane Hybrid Emulsion

Product Name

AquaVue™ WTJ

Manufacturer

Industrial Control Development, Inc.
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Description

AquaVue™ is a two component, water based coating for roll coat and spray applications on glass substrates.

AquaVue™ will cure at room temperature or with the use of low temperature ovens.

Clean up of liquid coating is achieved with water.

Available in standard **AquaVue™** colors, with custom colors available upon request. It has excellent weather, chemical and stain-resistance.

This product should present no health hazards in industrial applications with proper ventilation and hygiene practices.

General Application

AquaVue™ is designed to adhere to a variety of glass substrates: Annealed, heat strengthened, tempered, reflective, or high performance glass.

The product forms a hard, durable coating and is resistant to cleaning chemicals.

Other areas of application are lamination, wall cladding, signage, partitions, pattern art glass, and furnishings.

Surface Preparation

Surface preparation is required for successful adhesion of **AquaVue™**. All foreign contamination must be removed from the surface before application.

Please follow PPG's technical manual, "Recommended Techniques for Washing Glass".

Inspect glass prior to the application of **AquaVue™**. Re-wash as required.

Minimum Coating Thickness

4 to 6 mils (101.6 to 152 µm)

Some colors may require a double coat to achieve full opacity.

It is the responsibility of the applicator to determine the need for a second coat.

Application Environment

IDEAL CONDITIONS:
50-70°F (10-21°C)

It is suggested that the glass be coated within 1 hour to limit the amount of drying in equipment.

If running various size glass, it is recommended to coat larger glass sizes followed by smaller sizes.

Application Methods

Air Assisted Airless Spray equipment is required for application on larger stock glass pieces. Small pieces of glass can be manually sprayed. Please contact ICD for application equipment needs and procedures.

Typical Roll Coat Equipment

- Reverse applications require 40 grooves per inch.

Cure Methods

Ambient Cure

Coating can be handled lightly within 8-12 hours.

Allow 7 days before installation.

Coating will reach maximum adhesion and physical properties within 21 days.

Coating should be allowed pre-flash before exposure to cure temperatures above 212°F (100°C).

Oven Cure

Convection Oven: 10-12 minutes @ 300-325°F (149-163°C)

IR Oven: 3 to 6 minutes @ 300-325°F (149-163°C)

Allow 24 hours before installation.

Handling

Coating can be handled immediately after cool down to room temperature. Maximum adhesion of coating will continue to develop and be achieved in 5-7 days.

Adhesion

To achieve adhesion and cross linking, the use of additive KV-630 is required.

Use level is one percent (1%) by weight of base material.

Mixing Instructions

Roll Coater

While mixing the **AquaVue™** coating, slowly add 1% KV-630 (by weight of base material).

For example: 1 gram of KV-630 into 100 grams of **AquaVue™** base material. Mix for 15 minutes.

Spray

Use the same mixing procedure as roll coater.

Reduce with water, up to 25% by weight of base material. Mix additional 5 minutes, prior to application.

Water should be added prior to start of production run. Color variances potentially can occur if water is added during the production run.

Pot life

Activated material: Eight (8) hours in a sealed container.

Colors Available

10 primary colors are available. For customer color matching virtually any color can be achieved.

Typical Properties

Physical Properties.... Liquid

*Color..... Various
Solids 37-45% depending on color
Specific*

*Gravity:1.07-1.21 depending on color
pH:8-9*

Cured Properties:

Maximum physical properties 21 days

Pencil:4-6H

Solvent resistance: Plus 200MEK

VOC:under 225g/liter

Tests:

QUV: 10,000 hours

145°F (62.8°C) WATER: 14 days

Room Temperature water 30 days plus

*Solvent Resistance:..... Excellent
+200MEK rubs*

Installation

Installation Materials

Neutral cure silicones (GE, Dow Corning, Tremco) show good adhesion on clean surfaces.

Follow sealant manufacture's recommendation for correct amount for proper adhesion to the substrate. Substrate must be dry and cleaned for proper adhesion.

Glass must be mechanically supported.

Cured Coating Limitations

Not to be used for first surface or exterior applications.

Cleaning Recommendation

Cleaning can be done with use of a mild cleaning solution such as, an Isopropyl Alcohol or any general household cleaner for glass. Use a lint free rag to wipe off light excess debris.

For the removal of stubborn marks the use of a soft bristle brush with a mild cleaning solution is recommended. Avoid stiff bristle brushes. If more aggressive cleaning methods are needed, test a small area using more aggressive cleaning agents and rinse immediately with clean water.

Please contact ICD Tech Service for additional recommended cleaning solutions.

Availability

AquaVue™ is marketed throughout the Globe. For a fabricator near you or additional product information, please contact ICD High Performance Coatings, at 1-360-546-2286.

Or visit our web page:
www.icdcoatings.com