

## CRYL-A-QUARTZ

### GENERAL

CRYL-A-QUARTZ is 100% reactive, fast curing, high strength, methyl methacrylate (MMA) based, acrylic flooring system. It is a nominal 1/8 (Q-28) - 3/16 (Q-11) inch (3.18 –

4.75 mm) overlay system comprised of primer, double broadcast of DUR-A-FLEX decorative aggregate and topcoat(s). Surface finish can be smooth or slip resistant. This system cannot be thinned with solvents.

### COLORS

CRYL-A-QUARTZ uses DUR-A-FLEX decorative aggregate. It is available in standard colors and in two sizes, Q-11 & Q-28. Color options are standard colors and custom color blends. Please refer to Quartz Color Selector Chart.

### TYPICAL USES

- Laboratories
- Traffic Aisles
- Heavy Industry
- Walk In Coolers
- Loading Docks
- Manufacturing Areas
- Food Processing Areas
- Bottling Areas
- Freezers
- Commercial Kitchens

### SURFACE PREPARATION

The substrate must be dry and free of oil, grease, dirt, bituminous and other contaminants. Unsound concrete and laitance should be removed by appropriate mechanical means. Refer to the DUR-A-FLEX Surface Preparation Guide on our website for more information.

### MOISTURE CONCERNS

Please refer to the Floor Evaluation Flow Chart in the Contractor's Center of our website for a step-by-step process to determine the condition of the concrete.

### BOND TEST

Prior to application of the primer, bond tests shall be conducted to determine adequacy of substrate preparation. The bond of the primer to the substrate should be greater than the tensile strength of the substrate. A successful test shows substrate material and sheared aggregate adhering fully to the sample. If only laitance or a small amount of the substrate is attached, further preparation is required. Refer to the Bond Test Guide on our website for more information.

### VENTILATION

Prior to any application, proper "negative pressure" ventilation must be established. Please refer to the CRYL-A-FLEX Ventilation Guidelines on our website for details.

### APPLICATION METHOD / SPREAD RATE

All MMA resins require the addition of CRYL-A-CURE (BPO) to cure. To determine the correct amount of BPO necessary, refer to the CRYL-A-FLEX Mixing Chart. BPO usage is a function of the material and substrate temperature. **Therefore, the temperature of the floor must be measured prior to any mixing or application of material.**

**NOTE:** For each application of material and before mixing, mark your batches to ensure you achieve your spread rate targets. This is best accomplished by dividing your target spread rate by the width of the area being coated (or your planned wet edge). Example: If your spread rate is 100 square feet and your area is 20 feet wide you would make a mark every 5 feet (100 divided by 20 = 5).

Due to the fast cure of the material, only make enough material to be applied in 5 minutes. A typical batch size of primer or topcoat is usually 1 gallon (4 liters). Warmer conditions may dictate a smaller batch size. The primer is applied with a brush or roller at 80 - 100 Sq Ft per gallon (2.0 – 2.5 m<sup>2</sup> per liter) to achieve an even, puddle free surface. Substrates that are very porous may require an additional coat. Roller coats are applied with 1/2-inch (13 mm) nap roller. Rough substrates may require a longer nap to avoid puddles. Rough surfaces and holes must be patched with the appropriate CRYL-A-FLEX system before the body coat is applied. Based on the temperature, add the proper amount of BPO to the CRYL-A-PRIME P-101. Mix for 30 - 60 seconds or until the BPO is completely dissolved. Pour an even ribbon of material out onto the floor and roll to the proper thickness. The primer will cure tack free in 30 - 60 minutes.

If CRYL-A-BOND is used with primer, the next coat must be applied within 16 hours. Failure to do this could result in inadequate inter-coat adhesion.

The first coat of CRYL-A-GLAZE G-201 is roller applied at 80 - 100 Sq Ft per gallon (2.0 - 2.5 m<sup>2</sup> per liter). Q-28 or Q-11 is broadcast into the wet material at 0.5 lbs per Sq Ft (0.75 kg per m<sup>2</sup>). **Do not over broadcast, only apply enough sand to cover the wet resin**, over broadcasting can result in the resin not curing properly. Keep broadcast 3 feet (1 meter) back from wet working edge; this will make it

easier for the roller man. Let material cure and sweep/blow off excess aggregate.

When broadcasting aggregate, make sure to throw it high and let it “rain down” onto the surface. Do not throw at an angle as this can result in ripples.

Note: On aggregate, a double broadcast with Q-28 sand will yield an 1/8 inch (3 mm) thick floor. A double broadcast with Q-11 will yield a 3/16 (4.75 mm) thick floor. The Q-11 (thicker) floor should be used in areas that are exposed to impact, i.e. dropping of tools and/or heavy equipment use.

Second coat of CRYL-A-GLAZE G-201 is roller applied at 80-100 Sq Ft per gallon (2.0 - 2.5 m<sup>2</sup> per liter) with Q-28 and 70 – 90 Sq Ft per gallon (1.7 - 2.2 m<sup>2</sup> per liter) with Q-11. Aggregate is broadcast at 0.4-0.5 lbs per Sq Ft (0.6-0.75 m<sup>2</sup> per kg). Let material cure and again remove all excess aggregate.

The cured system is top-coated with two coats of CRYL-A-TOP T-301. The first topcoat is applied by roller at 60 – 80 sq. ft. per gallon (Q-28) or 50 -70 sq. ft. per gallon (Q-11). The second topcoat is applied by roller at 80 – 100 sq. ft. per gallon (Q-28) or 70 - 90 sq. ft. per gallon (Q-11). If a smoother finish is required, the surface may be sanded before the second topcoat is applied.

#### **CURE**

CRYL-A-QUARTZ components will cure in 40-60 minutes. The floor is fully functional one hour after completed application. **IMPORTANT, DO NOT APPLY THE TOPCOAT TOO THIN.** It may not cure properly; it will pick up dirt and wear prematurely.

#### **JOINT GUIDELINES**

Refer to the Joint Guidelines for complete details on our website.

#### **PACKAGING**

CRYL-A-QUARTZ resins are available in 5-gallon (19 liter) pails and 50-gallon (190 liter) drums. CRYL-A-CURE is available in 1-gallon (3.8 liter) cans, 5-gallon (19 liter) pails and 55 lb (25 kg) boxes. DUR-A-FLEX decorative aggregate is available in 50 lb (22.7 kg) bags.

#### **TECHNICAL INFORMATION**

CRYL-A-QUARTZ is part of a family of repair and wearing materials supplied by DUR-A-FLEX. If you require further information on this or any of our other products please contact our Technical Department.

#### **CLEANING**

This product is considered to be a low maintenance flooring solution however certain textures and service environments require specific procedures. Please refer to the master Cleaning Guide on our website.

#### **STORAGE CONDITIONS**

Store in a cool and dry place below 85°F (30°C), out of direct sunlight. Do not store near open flame or food. The shelf life is 6 months from ship date in the original unopened containers.

#### **CAUTION**

**CRYL-A-QUARTZ resins are flammable liquids in their uncured state. Smoking, open flames or sparks should not be permitted during the handling of the product. Workers should wear protective clothing consisting of splash-proof goggles, impermeable gloves and, where exposure limits are exceeded, an organic vapor respirator should be used. Air powered or explosion proof mixing equipment is required. Adequate cross ventilation should be provided, and if necessary, explosion proof fans may be required. All foodstuffs must be removed during application of the system.**

**As with all chemical products, individuals may have different reactions to exposure to specific products. This is dependent upon many factors, including the individual’s personal characteristics, the size of the installation, the ventilation available, the intensity of the exposure or the length of the exposure. Individuals may experience discomfort during the installation process of one product, but not another.**

**In some cases this is experienced as a skin irritation and in others it is experienced as an inhalant irritation. Typically, it disappears once the exposure is eliminated. In some cases people can become “sensitized” to a product and experience the discomfort every time there is exposure without Personal Protective Equipment (“PPE”).**

**To protect yourself from various exposures or discomfort during the mixing and application of our products, we recommend covering exposed skin including, using gloves, long sleeves, safety glasses and a respirator such as the 3M 8577 P95 Universal Disposable Carbon Respirator or a cartridge respirator.**

**KEEP OUT OF REACH OF CHILDREN.**

**If substrate and/or material temperature is above 90 F (32 C), Do Not apply material.**

***Before using any DUR-A-FLEX, Inc. product, be sure the Safety Data Sheet is read and understood.***