

CRYL-A-SHIELD

GENERAL

CRYL-A-SHIELD is a 100% reactive, fast curing, methyl methacrylate (MMA) based acrylic system. It is formulated clear as a thin film 12-50 mils (0.25-1.25 mm) coating/sealer. A typical system consists of 1-3 coats. CRYL-A-SHIELD is used to seal and eliminate concrete dusting, increase substrate strength and aesthetic considerations. Surface finish can be smooth or slip resistant. This system cannot be thinned with solvents.

COLORS

CRYL-A-SHIELD is available clear only.

TYPICAL USES

- Traffic Aisles
- Light Manufacturing
- Warehouses
- Containment Areas
- Textiles
- Sidewalks & Stairs
- Stadiums
- Parking Decks

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. Note, if shot blasting, be careful of blast overlap lines as they may be visible through the coating. Please refer to the DUR-A-FLEX Surface Preparation Guide on our website for detailed instructions.

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).

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 procedure instructions.

VENTILATION

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

APPLICATION METHOD

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.**

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 1 gallon (4 liters). Warmer conditions may dictate a smaller batch size. The primer is applied with a brush or roller at 80 - 125 Sq Ft per gallon (2-3 m² 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 rollers. 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. **The bonding enhancer CRYL-A-BOND or CRYL-A-BOND MT is required in CRYL-A-PRIME P-101 for use with this system. When recoating, the next coat must be applied within 16 hours. Failure to do this could result in inadequate inter-coat adhesion.** 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.

One or two coats of CRYL-A-PRIME P-101 or one of the CRYL-A-TOP resins are roller applied at 80-125 Sq Ft per gallon per coat (2-3 m² per liter).

For slip resistant surfaces a random broadcast of silica sand, emery, silica carbide or aluminum oxide is broadcast into the uncured resin. The typical particle size (depending on requirements) is in the 10-36 mesh size (2-0.5 mm) range. The typical broadcast rate is 2 -5 lbs of grit per 100 Sq Ft (0.1-0.2 kg per m²) per coat.

CURE

Each application in the CRYL-A-SHIELD system will cure in 45-60 minutes. At this time the floor is fully functional. **IMPORTANT, DO NOT APPLY THE TOPCOAT TOO THIN.** It may not cure properly, it will pick up dirt and wear prematurely.

PACKAGING

CRYL-A-SHIELD 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.

TECHNICAL INFORMATION

CRYL-A-SHIELD 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.

JOINT GUIDELINES

Refer to the Joint Guidelines for complete details on our website

CLEANING

CRYL-A-SHIELD is considered to be a low maintenance product. Please refer to the master "Cleaning Guide" for more detailed cleaning instructions.

STORAGE CONDITIONS

Store in a cool and dry area 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 container.

CAUTION

CRYL-A-SHIELD 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, organic vapor respirators. Air powered or explosion proof mixing equipment is required. Adequate cross ventilation should be provided and 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.

Use only as directed. 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.