

Innovation through Formulation

# LIFELAST CARTRIDGE GUN INSTRUCTION GUIDE

EFFECTIVE: 4/9/18

Prior to starting, please refer to the appropriate Technical Data Sheet and Application Specification Sheet for LifeLast material being used.

These instructions are to be used in conjunction with the accompanying  $MixCoat^{TM}$  Spray DPS 1500-01 Quick Reference Guide ( $MixCoat^{TM}$  Guide). Please be sure to follow this Instruction Guide for proper application of the LifeLast materials (the  $MixCoat^{TM}$  Guide is to be used for gun parts referenced only).

#### I. Definitions:

- Cartridge: the two cylinder plastic part containing the LifeLast coating materials
- Polyol: the pigmented or colored component of the LifeLast polyurethane
- Iso: the brown or non-pigmented component of the LifeLast polyurethane
- Target: the substrate/surface to which the LifeLast polyurethane will be applied
- Spray nozzle: the part containing the mixer element and spray tip that attaches to the end of the cartridge; see Step 9 on page 2 of the MixCoat™ Guide
- Atomization air: controls the air flow to the gun; Part F from Step 8 on page 2 of the MixCoat™ Guide
- Plunger retractor button: the button used to retract the plunger to its fully open/retracted position; the red button on the bottom of the gun handle
- Fluid control dial: controls the rate at which the plunger delivers the material; Part G from Step 8
  on page 2 of the MixCoat™ Guide

#### II. Air Requirements

- **a.** Minimum of 14 cfm (cubic feet per minute) air compressor is required. The supply pressure should be 90-110 psi.
- **b.** All compressors shall be in good working order and have adequate separators, filters, and drains to ensure contaminants, such as oil and water, are not present. Accumulation of oil and moisture shall be removed by regular purging.

### III. Prior to Placing Cartridge in Gun

**a.** Cartridges must be at a minimum temperature of 75°F. If the temperature is below 75°F, the cartridges must be warmed prior to application. For best results, a temperature range of 90° to 110°F is recommended. Do not use the cartridge at temperatures above 140°F. The cartridge can be heated in a 1000-watt turntable microwave, convection oven, weld rod box, or other suitable method. Verify the temperature of the cartridges using an infrared gun. **Do not overheat the cartridges.** 

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- **b.** Cartridges **must be shaken prior to use.** There are two methods for shaking a cartridge (note: the polyol portion of the cartridge must be uniform in color prior to use):
  - **i.** Method 1 (Preferred): use a mechanical paint shaker to mix the cartridge. Clamp the cartridge in the paint shaker and shake for a minimum of 3 minutes. The polyol must be a uniform color after shaking.
  - **ii.** Method 2: shake cartridge by hand. Hand shaking typically requires 5 minutes or more. The polyol must be a uniform color after shaking.
- **c.** With the cartridge in an upright position, place spray nozzle on cartridge and secure retaining ring (Step 9 in accompanying MixCoat<sup>™</sup> Guide).

### IV. Using Cartridge Gun

- **a.** Place cartridge in the gun according to Step 5 of the MixCoat<sup>™</sup> Guide. Note: in every instance, the polyol portion of the cartridge must be on the bottom when installed.
- **b.** Connect the atomizing airline to the spray nozzle as per Step 10 of the MixCoat<sup>™</sup> Guide.
- **c.** Turn the control for atomizing air (F) to highest setting "5". *Note: warmer material may require the atomization air to be set to a lower setting.*
- **d.** Adjust fluid control dial (G) to recommended setting as per the chart below:

Cartridge Temperature	Fluid Control Setting (G)
75°F	8
100°F	5

Note: warmer material may require less fluid control pressure.

**e.** Purge the spray nozzle by pulling the trigger **OFF-TARGET** until a uniform color and mix of the material is achieved. This should take only a few seconds. While continuing to pull the trigger, begin spray application by directing the nozzle at the target/substrate. Prior to stopping, turn nozzle away from the substrate and then release the trigger, ensuring that the trigger is not released until the spray is **OFF-TARGET**.

Note: Always start and stop spray application OFF-TARGET. Never initially pull or release the trigger while the gun is pointed directly at the target/substrate, as it will result in the application of misratioed material.

### V. Finished with Spraying

- **a.** Press the red button to retract plunger from the cartridge.
- **b.** If material is still present in the cartridge, remove the spray nozzle and cap cartridge with the nose plug.
- **c.** If cartridge is empty, dispose of cartridge according to local regulations. Please refer to the appropriate LifeLast material SDS for handling and safety requirements.