

## ***Quick Tips for Clean Armor Application***

**MOST IMPORTANT TIP:** "When you see what you like... shine the light". Do not cure the product until you see the look you want; curing will lock it in place!

**APPLICATION:** All sealers and clear topcoats can be brushed, rolled, or wiped. Most can be sprayed on.

**SPRAYING:** It is recommended that you use between a 0.8-1.3 tip and a pressure setting of 16-35 psi. These finishes need to be finely atomized, due to having 100% solids. Fine atomization spray equipment is recommended.

**WIPING:** It is recommended to use a stain pad or a lint free cloth when applying by hand. A lint free fine nap roller can be used, but we don't recommend foam rollers or foam brushes (as they can inject air bubbles into the finish). If you see air bubbles appear, continue to hand wipe (and/or self-level) until you achieve a clear appearance.

**THINNING:** Can be thinned with IPA (isopropyl alcohol 91-99) up to 20%. Do not use denatured alcohol.

**TEMPERATURE:** For best results, Clean Armor finishes should be used at a temperature between 70°-110°F.

**AGITATION:** Satin and matte sheens should be shaken weekly to avoid settling.

**SANDING:** If sanding between coats, start with a 320 grit or finer. Course, low grit sandpaper doesn't work well on these finishes.

**SELF LEVELING:** These finishes are self-leveling. They will stay "open" for as long as you'd like, until you cure them with sunlight or the appropriate LED light (CUVO is recommended).

**CURING:** These finishes will not dry on their own. The recommended method of curing is to use a CUVO light indoors. Clean Armor finishes will cure in 2 minutes with the proper wavelength (365-405 nanometers). CUVO lighting operates at this wavelength and was designed to cure these products. CUVO offers handheld lights and hangable 4' bar lights; both types having a 110 plug but are dual voltage. Indirect and direct sunlight will also cure these finishes. It is important that the entire applied surface sees the light at the same time to ensure proper curing. It is not recommended to cure in sections.

**CURING LIGHT DISTANCE:** Adjust the distance of your curing lights to achieve a tack-free through-cure at 2 minutes exposure. If you are curing in under 1 minute the lights are too close and can cause accelerated curing of the material which can lead to micro-bubbles or can disturb the look of the applied film. The look or profile of the wet film should be substantially the same after curing at the recommended rate.

**COVERAGE:** 1 quart of these finishes will cover 402 sq ft when applied at 1 mil thickness, and 1 gallon will cover 1608 sq ft when applied at 1 mil thickness.

**TESTING:** We recommend that you test the application and curing of all Clean Armor products on test pieces, before applying them on a real project piece. Become familiar with how they work, first.

**LONGEVITY:** Clean Armor finishes will last up to 1 ½ years in the bottle, with no light exposure. Keep the lid on while you are working! Keep open materials away from indirect sunlight (such as windows and open doors).

**LIGHTING TEST:** To test the existing lighting in your workspace, place 1 inch of coating in a clear, plastic cup and sit it in the middle of your workspace. Check it every 10-20 minutes to see if the coating has cured. This will tell you if your current lighting prematurely cures these finishes as you are working on a project.

**PPE:** Wear the same PPE as you currently wear when using a solvent system. Always wear nitrile gloves.

### ***General Information About Clean Armor Products:***

- We recommend reading the SDS and TDS on each product before use.
- When applying Clean Armor products, you will use 3-4 times less than your conventional products while completing your projects in record time!
- No VOC's: a 100% solids system (what you apply is what you keep after the cure), nonhazardous.
- All clear topcoats are available in gloss, satin, or matte sheens.
- All products within the same product line may be mixed to create custom sheen levels.

## **FAQ's**

**Q:** Can I stain my wood surfaces?

**A:** Yes, both water & oil-based stains can be used (make sure the stain is fully cured before applying our products).

**A:** Mohawk ULTRA® Penetrating NGR Dye Stain works well and can be mixed with Clean Armor wood products (make sure your dye is an acetone solvent platform)

**Q:** Do I need to sand between coats?

**A:** No. Unlike traditional products, ours have an inter-coat adhesion so that you don't have to abrade between coats.

**Q:** Can I use other makes of product on top of Clean Armor?

**A:** Yes, but you'll need to follow traditional procedures before it's applied on to the cured Clean Armor product.

**Q:** After curing my finish looks milky or has moisture on it, is that a problem?

**A:** No, this is just residual moisture in the product, or from in the air in humid conditions. Simply wipe the moisture off with a clean cloth.

**Q:** Why does my finish have yellowing after I've cured it?

**A:** Yellowing can occur if the product is cured too quickly. A good practice is to keep your UV light source about 3-4 feet away, to cure it more slowly, which typically takes about 3 minutes.

**Q:** When talking about a coating thickness of 1 mil what does this mean?

**A:** It's a common industry unit of measure for plastic sheeting and films. 1 mil is equal to 0.001 thousandth of an inch or 0.0254 mm.

**Q:** Ok, but what is that in layman terms or what does that compare to?

**A:** The typical trash bag measures between 1.2 mils to 1.7 mils and the heavy-duty version between 3 and 6 mils. Your typical credit / debit card is around 30 mils.

mil	mm	inch	Item
1	0.0254	0.001	
3	0.07619	0.003	
6	0.152399	0.006	
10	0.254	0.01 1/64 in	
15	0.381	0.015	
20	0.508	0.02	
30	0.762	0.03 1/32 in.	Credit card
60	1.524	0.06 1/16 in	
100	2.54	0.1 3//32 in	

**Q:** Do I need special spray gun equipment?

**A:** No. Most standard spray guns used in the automotive finishing industry are suitable to use. However, the spray guns will need to have non-transparent cups fitted. 3M does supply black PPS 2.0 cups with a 0.125 micron built in filter. These are just perfect for UV systems. Obviously, some tweaks to the gun set up will be required to suit the parts and the specific coating you want to apply. We can offer a set up guide as a starting point, but typically the Finishing Technicians have their own specific preferences.

**Q:** When you say your product is VOC / HAP free what does this mean?

**A:** No VOC means that a product has less than 5 grams per liter of volatile organic compounds (VOCs). HAP free means we have no Hazardous Air Pollutants (HAP) in our products. These are typically within the solvents commonly found in traditional sprayed systems. Here is a more detailed explanation about VOCs and HAPs:

[HAPS Free Solvents - Low VOC - Non-HAPS Alternatives \(ecolink.com\)](http://ecolink.com)

**Q:** What is the maximum temperature that these coatings can be exposed to?

**A:** 400F (204C).