

## Contents of the Kit

Each NanoMoldCoating® Quick Cure kit comes with:

- (1) spray bottle of Quick Cure NanoMoldCoating®
- (1) bottle of NanoMoldCoating® remover
- (2) microfiber application cloths
- (2) microfiber tipped application swabs for hard-to-reach areas

## Notes

Quick Cure is designed to be used in mold temperature range of 50-480° F /10 - 245° C

As when handling all chemical solvents, personal protective clothing; eye protection; and solvent resistant (nitrile) gloves should be worn at all times.

Essential to the success of the coating:

- Proper Cleaning – Residual oils left on the coated surface may cause the coating to wear prematurely.
- Proper Heating – The heating process initiates the catalyst in the coating.

## Mold Cleaning Prior to Coating

1. Begin by pre-cleaning surfaces with a standard mold cleaner/degreaser. Remove all surface debris and any oils, lubricants, or rust inhibitors from the pores and crevices of the mold.
2. Use a clean white cloth wetted with ethanol, IPA alcohol, acetone, or MEK solvent to remove any residual degreaser or oils. Do not use red shop rags, as these are often contaminated with lubricants or detergents.
3. Continue cleaning with solvent until no oil or debris is evident on the cloth.
4. Cover the cleaned surface with a clean cloth and allow it to dry for a minimum of five (5) minutes.

## NanoMoldCoating® Application

1. Heat the mold to approximately 120°F (49°C). If a thermolator is employed, it should be set at 120°F (49°C).
2. Shake the bottle well immediately before applying and often during use.
3. Apply fine mist to the mold surface making sure to lightly coat the entire surface. When purchased in larger volumes, the coating can also be applied using low pressure spray equipment that produces a light mist.
4. Wipe or swab lightly to provide a thin and even layer. Remove any excess pooling immediately. When applied correctly it should appear wet, but not dripping or pooling.
  - Technique: When applying, work in one direction at a time and be careful not to leave swirl marks on the surface. On clear parts, swirls can show up on the surface.

- For highly polished surfaces it may be necessary to lightly “fan” any swirls out of the surface.
- 5. After applying, heat the mold to 240° F (116° C) allowing the coating to be baked for a minimum of ten (10) minutes prior to production.
- 6. The mold is now ready for production.
- 7. Touch up applications can easily be made during production breaks.

## **Maintaining Molds with NanoMoldCoating® Quick Cure**

For general maintenance of molds when the coating is on the mold, use only Nanoplas Nano Mold Cleaner for best results. Nano Mold Cleaner is designed to not remove the coating. If other harsh cleaners are used, you will run the risk of removing the coating. Do not use a solvent based cleaner.

### **Remover**

If at any time, coating removal is required: spray remover onto the surface and let soak in for 1– 2 minutes. This breaks the chemical bonds. Rub aggressively to remove the coating.

### **Production Notes**

Also beneficial to the success of the coating are adjustments made to compensate for the higher performance potential afforded by the NanoMoldCoating®.

Less Friction Resistance – allows for modifications to molding parameters, including:

- Reduced Injection Pressure
- Reduced Pack Pressure

Benefits of Fine Tuning – settings that take full advantage of the coating’s properties can produce benefits including:

- Reduction or elimination of Sink Marks
- Reduction or elimination of Short Shots
- Improved Cycle Time
- Exceptional Part Release

### **Storage & Handling**

NanoMoldCoating® Quick Cure should be stored in a cool, dry area.

Containers should be agitated before use or dispensing into other containers.

Do not expose the product to freezing temperatures. If the product does freeze, thaw at room temperature and mix well before using.

NanoMoldCoating® Quick Cure has a shelf life of one (1) year from the date of manufacture.