



User Guide

NanoMoldCoating

NanoMoldCoating® ***QC, QCsj, QCru*** **General Application & Storage**

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

For Use In 5°C - 245°C Temperature Range
Only Follow These Instructions Explicitly!!!!

Contents of the Kit

1. Each NanoMoldCoating® kit comes with:
 - o (1) spray bottle of NanoMoldCoating®
 - o (1) bottle of NanoMoldCoating® remover
 - o (2) microfiber application cloths
 - o (2) microfiber tipped application swabs for hard to reach areas

Notes

Essential to the success of the coating:

1. **Proper Cleaning** – Residual oils left on the coated surface may cause the coating to wear prematurely.
2. **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 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 used, 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.
 - Technique: When applying, work in one direction at a time and be careful not to leave swirl marks in the surface. In 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 bake for a minimum of ten (10) minutes prior to production.
6. The mold is now ready for production.
7. For longer coating life, repeat NanoMoldCoating Application steps 1 – 5 before going into production.
(It is possible to recoat over the coating for touch up and continued release.)
8. Touch up applications can easily be made during production breaks.

Maintaining Molds with NanoMoldCoating

** For general maintenance of molds, when the coating is on the mold **use only** Mouldpro, **Nano Clean** for best results. **Nano Clean** is designed to not remove the coating. If other more harsh cleaners are used, you will run the risk of removing the coating.**

Remover

1. 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.
2. 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

NMC QC should be stored in a cool, dry area.

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

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

Change log

Date of change	Change	Version
10-07-2019	Layout	001