

# Home-made Mold Release

By: Greg Williams

Make your own with common materials for  
mold-making and resin casting



## Creating your own home made mold release agent for mold making and resin casting.

There are many commercial mold release sprays on the market that are an essential part of mold making. Before making my own, I depended on a trusted brand used by professional sculptors, movie industry special effects artists and serious DIY garage resin artists called: Mann Ease Release 200. It is a general purpose Mold Release for use with silicones, urethanes and resins. It also has the quality of providing a satin finish to cast parts.



### Idea in a pinch

I came up with the idea of making my own mold release while right in the middle of working on a mold for a new product. Unfortunately, just as I was mounting the master and making the mold container, I unexpectedly ran out of the Mann Ease Release 200....bummer. It typically takes me a matter of hours from start to finish to get new molds made so I couldn't wait for a new ordered can to arrive a week later to continue. I was on a deadline and I



needed to get the master mold completed to rapidly move on to the production molds. So, after a few minutes researching various brands and their formulas, I realized that the most common ingredient was petroleum jelly. I was pleasantly surprised because when I first got in to mold making and casting years ago, I successfully used petroleum jelly as a mold release, and it worked flawlessly. And I knew from experience that petroleum jelly could be thinned with mineral spirits. Now I was on to something! I could thin petroleum jelly down to a sprayable consistency for airbrushing application and to brush on thin, controllable layers more precisely.

### Mixing it up

After some trial and error, I got the mixture right. I found a spare glass hobby paint jar to mix it and store it. You can find these small glass jars at most hobby shops and/ or craft stores. I scooped out a coin sized glob of the petroleum jelly (I used Vaseline® brand, but most petroleum jelly brands will work). I then dispensed approx. three half-full eyedroppers of mineral spirits. The petroleum jelly is thick, so instead of trying to shake the mix by hand or hand string, I used a hobby electric paint mixer to thoroughly blend and mix the components in the jar. This works well to blend the mineral spirits and jelly into a thin consistency I was after. If you find that the mix is still too thick, add more mineral spirits and re-mix. The consistency you are after is like milk or cream. Once mixing is complete, check the consistency and you're done and ready to use your mold release for your mold-making needs.



### Airbrushing the mold release

Since the mix has a thin consistency, it is very handy for airbrushing thin, fine mist layers. You benefit with having much more control and use far less mold release when making a two-part mold, open-type mold or applying over masters before pouring the mold rubber over your originals. It is just like using a commercial brand spray but with less over-spray in your work area. For airbrushing, use an eyedropper to dispense a little bit of our mix in your airbrush and dial in an air pressure to approx. 15 psi. if using a gravity feed airbrush. For bottom-feed airbrushes, dial in 20 psi.



## Airbrushing cont.

Bottom-feed requires a bit more air pressure to pull the material up from the colour cup. Spray on thin, finely atomized layers of mold release over your originals in preparation for pouring RTV rubber, silicones, urethanes, etc.

## Cleaning your airbrush and brushes

Since our DIY mix is petroleum jelly thinned with mineral spirits, clean up is just as easy. Pour some clean mineral spirits or lacquer thinner in the airbrush and spray it through. Petroleum and mineral spirits won't harm your airbrush. Most airbrushes are designed to handle enamel paints, mineral spirits and lacquer thinners. As I understand it, petroleum-based products also acts as a lubricant. So by spraying this home-made mold release through your airbrush, you're actually lubricating needle, and air channels inside. So it's a win, win!

## Brushing on the mold release

Brush application is just as easy and more precise. I recommend using a soft bristle paint brush. As in brush painting, simply dip the brush tip into the liquid mold release and apply a thin amount over your master part or select areas, let stand for a few minutes and pour your mold rubber as usually.

