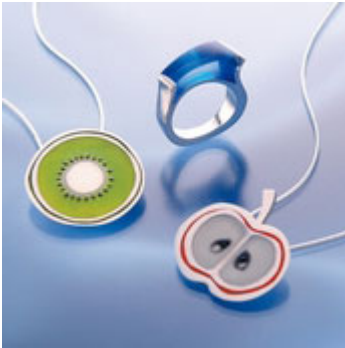


UV RESIN AND METAL CLAY

Demonstration by Petra Wennberg at the ACWUK Guild Conference 2007



UV Resin is the latest exciting material to reach the metal clay world. This is a brand new way to add colour, or precious keepsakes, to your jewellery!

- Use the UV resin to embed stones, dried flowers, glitter, photos, and other decorative elements.
- Fill cavities, use the resin to add a subtle layer of colour on the silver, or maybe build up a thick domed top layer.
- Use the resin on its own in moulds to create adorable 3D components to set in your silver.

The resin most of us have worked with up until now would be a two-component epoxy resin. These can be difficult to work with for several reasons; they need exact measuring when you mix the resin and the catalyst (hardener), they should be the same temperature when mixed, and need to cure in a stable temperature, they take at least 24 hours to cure (if they cure at all!), they smell, and it is hard to avoid trapping air bubbles. Due to the mixing and measuring you often end up with little cups full of sticky resin, and it can get a bit messy. The worst thing about traditional resin is coming back after 24 hours, only to discover that you made a mistake in the mixing and the resin is still sticky, and, a fly decided to lay itself to eternal rest on top of your carefully planned design.

With UV resin there is less waste as you don't have to mix two components, and you don't need to worry about measuring up exact measurements. The UV resin doesn't smell, is non-yellowing and self-levelling. And it takes about 2-5 minutes to cure under a ultraviolet light. When cured, the resin has a hard, smooth, shiny finish. It can be filed into shape and then sanded and polished into a high shine. So all-in-all, very easy to use!

Note - there are different types of UV gels available. You can use UV Nail Gels; however, these leave a sticky layer after curing, which needs to be removed with an acetone/alcohol mixture. Curing times might also vary.
The P2 Jelly sold by Art Clay suppliers comes out rock hard and glossy, straight from the curing.

If you want to create a piece with layers of colours you can really see the advantage of using the UV resin. Traditional resin need up to 24h to cure each layer before you add the next colour. So if you want to work with, say 5 colour built up on top of each other, it can take a working week to get the piece finished. With UV resin, it would be nearer 30 minutes, as each layer cures in about 5 minutes, and you can then add your next layer straight away.

One thing I love about the P2 Jelly, is that it comes in a tube (similar to oil paint tubes), making it easy to apply - no more messing about with scooping thick gooey gel out of pots with sticky spatulas! You can even apply it straight from the tube if a large area needs covering.

Ways to use the UV Resin Gel

Well, this really is a case of using your imagination. There are so many things you could use the resin for. I'm really looking forward to seeing what you all come up with - please send me photos!

The resin is set on, or in, metal clay that has been fired, and finished - so do all your sanding and polishing before adding the resin.

- You can use the crystal clear gel on its own to create a water-like effect on top of the silver. Half trap a few shells and some sand in part of the resin, and voila - a beach charm!
- Subtly (or strongly) coloured, in thin layers on top of the silver. You can pick parts of a design or texture and highlight these with colour, using the resin like paint, like the flower earrings and pendant below.

- On its own, cured in a mould. For strength, you can create cabochon style items and set them in fine silver bezels.
- Coloured or clear to build up a section of resin set in the silver, like in the blue ring below.
- Coloured or clear to trap items in a section of resin set in the silver.
- Trap mementos, like a lock of hair, a special ticket stub, a cherished photo, piece of a letter, shells, a broken bead or whatever else you have hiding in a box - I'm sure we all have those boxes?
- Create little photo charms by taking a photocopy of a photo (enlarge or shrink as needed), cover in decoupage glue or craft glue, let dry. Create a silver frame, with a solid background, set the photo and cover with resin.
- Things don't have to be covered completely with resin - you can use it as a holder - for example, you can trap beaded wires in the resin - there's a great example in the book '*Metal Clay and Mixed Media Jewelry*' by Sherri Haab on page 74.



To build up resin like I've done in the blue ring above, create a silver frame first. Fire and finish the piece. Carefully cover the sides of the frame with clear packing tape, to create a dam to fill with resin. Burnish the tape onto the silver to ensure the resin won't leak out. Make sure there are no marks or finger prints on the tape before you set it, as this will leave marks in the resin.

The same technique is used for the rectangle with dots above (which is going to become a bracelet when finished). I made the piece and pierced with holes in different sizes, fired and finished, covered the back with tape, and then filled with resin,

The flower earrings and pendant above have two or three thin layers of different colours, from bright yellow to red, to create a lovely transition of colour. In the middle I also trapped some red micro-beads to give the look of pistils or seed (sorry, my plant anatomy knowledge is letting me down here).

UV Resin Gel



UV Resin gel can be used with or without pigment colorants. It comes in gel viscosity but can be thinned with heat. You can apply it straight from the tube, or with a spatula. I like working with toothpicks, handy for mixing and manipulating the resin into position.

Use a 2-part moulding compound to create moulds which you can then cure your resin in, see picture above, second in from the left on the bottom row. This is excellent for making three-dimensional pieces, or maybe resin cabochons to mount in your silver. The resin will separate from the mould without any need for release agents. Most commercial silicone style moulds also work great for this.



You might also have heard about using coloured pencils, like Berol Prisma or Karisma, for adding colour to your metal. These need to be covered with a fixative to seal the colour - the clear UV resin is perfect for this. And it is perfect for sealing an inlay of mother of pearl (the Raden technique), like the moon pendant here.

Make sure your UV light can reach all the corners of the gel. Add, and cure, in layers if you need. Angle your piece differently throughout the different curing sessions to help cure all of the resin. You can make your own holder for the piece with a bit of polymer clay, or thick foam with a slot cut into it.

UV Resin Gel Colours



Use these to add a whole range of gorgeous colours to the UV resin. They can be mixed with each other, and can be used in varying amounts to give a wide range of tones.

I prefer to mix my colours on a small paper palette, like you use for artistic paints, you can also use baking paper. Drip out ONE drop of colour on your mixing surface, then pick up a small quantity of colour on a toothpick (or pick it up on the toothpick straight from the bottle) and transfer this to your gel. Mix carefully.

If you add the entire drop of colour to your gel it will probably be too much, it is better to add more in small quantities. The colours provided by Art Clay suppliers are very rich in pigment. Shake them well before use. You might want to use the wide flat side of a palette knife to break down the pigment and blending them into the gel. Some colours require more mixing and blending than others.

Note - the gel takes longer to cure if you add colour. Very deep colours (gel with A LOT of colour added) might actually not cure at all. If you've added colour, let the resin cure in the UV light for about 5 minutes, or more, if needed.

I like to start with a thin layer of clear gel, which I cure before I add the coloured layer. The clear gel will bond better with the silver, so will create a strong bond. You can also try adding a clear layer on top of your coloured gel - this gives your colour a beautiful depth. Each bottle contains 15ml - as you usually use less than a drop per application, this bottle should cover more jewellery than you can count!

You can also have a play with colouring the gel with other things, like water colour in tube, eye shadow, glitter, or acrylic paint. You'll find that some colours work better than others, so always do a small test first - both to see how the colour blends with the resin, and how well and/or long it takes to cure.

UV Light Box



There are many versions of UV lights available. Tiny nail lights with just one tube, larger nail light boxes with several tubes, and boxes designed specifically for larger items. My favourite box, the green one on the left, comes from Japan and has three UV lights, two black tubes and one germicidal tube, each of them 9W. It has a wide opening front door and a large curing space. This is a large box, and it isn't cheap, but it's a great quality box.



Good quality nail UV lights work well too. Just make sure you get good quality, that they come with a warranty, and that you can get replacement bulbs. If you have any questions, I'm happy to help.

UV bulbs need changing regularly to keep them efficient, i.e. curing the resin. As this is quite a new product for jewellery makers it is hard to tell you how often this is needed. A UV light used in a nail salon should be changed every 6 months or so - but then the light is probably used at least once a day?

Note - UV light is harmful, to your skin and your eyes. If your UV light doesn't have a door, make sure you don't look into the light when it is switched on. Remember that light can also enter the eye even if you're not looking straight into it. Be sensible - you only have one pair of eyes.