

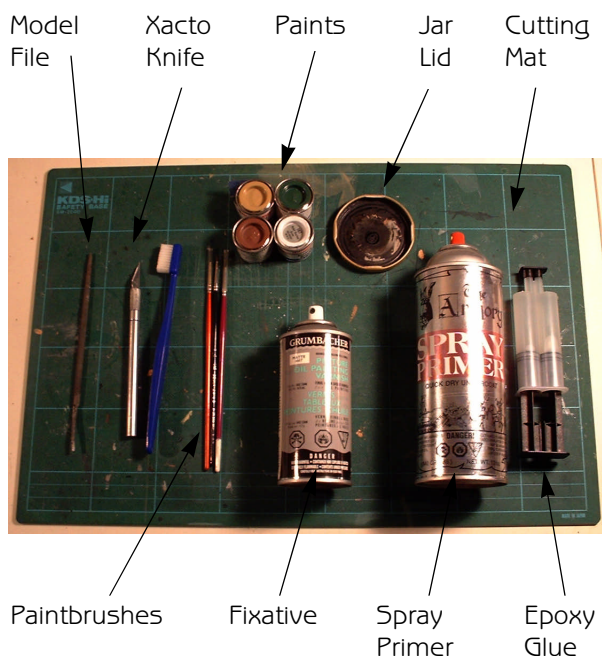
# Painting Miniatures

## Introduction

Whether used for Dungeons and Dragons, Warhammer, or any other game, well painted miniatures can dramatically enhance the experience. The information contained within this booklet is designed for those wishing to create show-pieces: it is not for those who want to paint entire armies. The goal in painting a miniature figure is to make it as realistic as possible.

## Materials Needed

As in any hobby, there are a variety of different materials



and tools which can be used. Some are absolute necessities, while others can help with the process.

**Xacto Knife** - This is a must. A metal barrel with disposable blades, this tool is used to trim excess material from the figure as well as some additional sculpting when and where required. Children under the age of 12 should use this tool only with adult supervision.

**Model File** - For filing the figure to remove moulding lines or flash.

**Paintbrush** - The better the paintbrush, the better. Avoid cheap paintbrushes as they will not hold a point and many will shed bristles. Buy brushes in four sizes: 2/3, 00, 000, and 0000. The 000 brush will be your main brush and the others will be used to specific situations. The larger brush (2/3) is used to apply the washes to the model. This brush can be older and/or cheaper since it is not required for small detail work.

When pointing the brush, wet your fingers and gently roll the brush into a point. NEVER put a brush in your mouth. This often results in a mild (and sometimes not so mild) form of poisoning called "painter's colic".

**Paints** - Many types of paint will work, but the best to use are either designed specifically for metal or plastic figures, or model paints. I personally prefer Humbrol model paints as they have a wide selection of colours and are very high in quality. Regardless of the type of paint chosen, they should always be matte, never gloss (except for liquids).

**Paint Thinner** - Buy thinner to match your paints. If possible, buy thinner at the same store as you purchased your paints. In general, however, purchase turpentine for oil-based paints. Not paint thinner, turpentine (they're not the same thing). Thinner can be used to clean brushes, but for washes, a quality turpentine is best.

**Spray Primer** - The model must be primed before it is painted, particularly metal figures. Purchase primer designed specifically for figures as these will be thin enough to prevent filling in the detail as well as adhering properly to the surface.

**Spray Fixative** - This is used once the figure is completed to preserve and protect the paint job. Find a fixative which creates the desired finish, preferably a matte one. I find that the best fixes are those for oil paintings.

**Epoxy Glue** - Many figures come in pieces and some must be attached to their bases. The best glue to use is epoxy which is a two part glue which is mixed together in equal quantities to activate. The glue will bond metal to metal and metal to plastic.

**Cutting Mat** - Although you won't be doing a lot of cutting, this will protect the surface when you do and can also be used to protect the surface from paints or thinners.

**Metal Jar Lids** - These are sometimes needed for mixing paint or for creating washes. They should be metal only without cardboard or plastic inserts. DO NOT USE PLASTICS. Most of the paints and thinners you will want to use will eat the plastic.

**Eyedropper** - Used to add paint and/or thinner in creating washes.

**Contour Putty** - Used for filling in holes.

**Toilet Paper** - Quantities of toilet paper are indispensable for cleaning the brushes between colours, cleaning the eye dropper and jar lid, and cleaning up spills.

**Q-tips** - Used to remove excess paint or glue from the model if over-applied.

**Fine Grit Sandpaper** - For smoothing the model in areas where the file cannot reach or when a smoother finish is required.

**Magnifying Lamp** - This type of lamp mounts on a table or desk and contains a large magnifying glass. These are available in a wide variety of sizes, qualities and prices. For anyone wanting to paint a lot of figures without going blind, this is a must.

## Preparing the Figure

Before priming, the figure must be cleaned and trimmed of all "flash" and other moulding imperfections. Examine the model carefully to determine which portions are flash and which are details. Use a knife to trim away any excess metal or plastic, being careful not to remove too much material. Use a file to smooth any moulding marks or lines. Small pieces of very fine sandpaper can be used when the file is too coarse or will not fit into small spaces.

**Caution:** As some figures contain lead and other poisonous chemicals do not sand or file metal figures near food or drink or over surfaces where such is to be prepared or consumed.

Do not assemble the figure or attach it to its base (if separate) until all of the pieces are painted. Try to avoid painting the areas which are to be glued. The glue adheres better to the primed surface.

While the model is being smoothed, think about which colours will be used to paint the figure. Choose colours for the flesh tones, fabrics, weaponry, etc. Planning will help to anticipate any problems with particular areas or textures.

After the model is smoothed, it should be washed before being primed. To wash the model, use a soft toothbrush (ensure that the toothbrush is soft: hard or medium may bend the figure) with a small amount of dish-washing detergent. Use very little pressure when cleaning the model to avoid bending any small pieces or marring the surface. Rinse the figure thoroughly and dry using toilet paper.

## Priming the Figure

Before priming the figure, decide on a colour for the undercoat. The three most common colours for undercoating or priming are white, black and grey. Each of these is generally used for a different purpose:

**White:** Undercoating with white will make the colours more vivid and intense. Use white when undercoating heroes, ghosts, or other luminous characters/beings.

**Black:** Undercoating with black will darken and desaturate the colours. Use this on zombies, dark minions, orcs, goblins and other darker creatures. This can also

be helpful if you find it difficult to paint right to the edges as it can hide small imperfections.

**Grey:** Undercoating with grey provides a neutral ground on which to paint the colours. This will interfere with the actual colours the least and is generally used to preserve the look of the colours themselves. I prefer to use grey primer for this reason.

Spray primers are the best to use as very thin coats can be achieved. Shake the can of primer for a good 30 seconds before using. Shaking the can for a less amount of time will cause the primer to be thicker or more granular, ruining the surface of the model. Lay the figures down on sheets of newspaper and use short sprays to apply the primer.



When priming the figure, ensure that there is sufficient ventilation as the spray primer is quite toxic and also ensure that the area where the priming is to be done is clean. Stray dust particles and hairs can adhere to the primer ruining the detail. If this does occur, use a soft toothbrush to remove these particles. Since much of the primer will also be removed, you may need to reapply the primer.

Spray the primer on in several very thin coats, allowing an hour or so drying time between coats. Too much primer will quickly ruin the model by filling in detail or running.

## Choosing Colours

The colours used should be low in saturation (intensity). Very bright or intense colours are not realistic at small sizes. Also, choose colours lighter than the desired finished colour as the application of the dirt wash will darken the colours.



## Base Coat

After the figure has been primed, the base colours are painted in. These are the colours which will determine the final look of the piece, but will initially be covered by washes.

Start on those areas which are "farthest back". For example, when painting the head, paint the eyes first, then the skin on the face, and then the hair. Only solid areas of

colour are required at this point, so shading or blending should not be added.

To avoid mistakes or other problems due to your hands shaking, hold the model in your left hand and brace your right hand against it using your little finger (reverse this if you are left-handed).

The paint should be added carefully at this point. Different colours and/or types of paint will be more or less opaque (lighter colours tend to be more translucent). For transparent colours, apply the paint in a series of thin coats, allowing sufficient drying time between coats (6 hours in the case of model paints). NEVER apply the paint thickly as it will fill in the details.



Some portions of the model will be several different colours in the finished model. Hair and fur are examples of these types of textures. To paint the base coat for these areas, use the midtone colour or the colour whose lightness is halfway between the darkest and lightest colours used for the area.

## Dirt Wash

To apply the dark shading to the figure, a black dirt wash is used. To create the wash, mix 1 part black paint and 2 parts turpentine. Apply the wash over the entire model using a larger thicker brush (2/3).



Be careful with areas of silver or other metallics as the thinner will cause the paint to liquefy. When applying the wash to these portions, use a smaller brush and do not move into other areas since the metallic flakes will travel to the non-metallic areas.

Apply the dirt wash carefully over the flesh areas as these portions should not need to be too dark. The dirt wash can be used for dark creatures such as orcs and goblins, but a midtone wash is best used on humans and heroes.

## Midtone Wash

A midtone wash is used when the figure or portions of the figure are to be lighter, less "dirty" in appearance, luminous, or are furry. This is applied after the dirt wash to lighten these portions. This is in the same colour as the base coat, and sometimes a little lighter, depending upon

the effect. For luminous areas, for example, the midtone wash should be very light. Avoid using pure white, however, as this will make the highlight areas impossible to pick out.

As with the Dirt Wash, use a mixture of 1 part paint and 2 parts thinner. Adjust this ratio for a more or less opaque wash.

For large areas of exposed flesh on humans, a midtone wash is essential. This is usually in a medium brown or unsaturated orange/yellow.

## Highlights

After all of the washes have dried thoroughly, the highlights are added using the same colours as applied in the base coat. These colours are applied to the raised and exposed portions of the figure to enhance those areas. Do not apply the paint to the edges of each area: these should be left dark for the shading. When the highlight colour is a lot brighter than the portion where it is applied, blend towards the edges by applying the highlight colour in thin coats, each coat being smaller than the last.

When painting hair or fur, use progressively lighter colours and paint thin lines of colour. Do not paint in the recessed areas as these should remain dark.

## Assembling the Figure

Once the figure has been painted completely and if it is in pieces, it is assembled. This is done using epoxy glue as this will bond many types of materials and provide a strong seal.

To use this glue, squeeze out a small portion onto a small square of card and mix the two parts together with a toothpick. Using a toothpick, apply a small amount of the glue to both pieces. Press the pieces together and hold for a few seconds. The bond becomes strong in a couple of minutes. The figure can be held while waiting for this (ensure that the TV is on), or a small amount of modelling clay (plasticine) can be used to hold the part in place until dry.

## Bases

Attached bases are painted in the same way and at the same time as the rest of the figure. The only thing you need to watch for with attached bases is small bumps on the bottom which will prevent the figure from standing straight. Use a medium grit sandpaper to remove these. Also ensure that the figure will be standing correctly on its base: some figures are bent where the feet connect to the base.

For some figures, the base is separate and must be attached. In many cases, these bases are smooth plastic with no details at all. These are often coated in sand or green felt flock and then painted to provide texture as well as colour.

To attach the figure and paint the base, use epoxy glue and glue the figure to it's base. Use something to prop up the figure to ensure that it is straight until it is dry. After the epoxy is thoroughly dry, use contour putty to fill in any remaining holes. Wait for the putty to dry and smooth the surface using sandpaper.

Coat the top of the base with a thin layer of epoxy, being very careful not to get any glue on the sides of the base. Sprinkle either or both of fine grain sand or green felt flocking onto the glue.

Once the glue has dried, paint the top of the base. When sand has been used, paint the base a medium grey or beige and add small, scattered patches of dark green. In the middle of the green patches, add small amounts of a medium green (not too bright) for highlights.

When green flock has been used, add some areas of a yellow ochre (dark, unsaturated yellow) to show variations in the vegetation. Adding some grey or brown areas for dirt can also add realism.

The base can also be decorated with pieces from other figures. Skulls, swords, limbs, etc. can be cut from other figures and glued in place on the base. Remember to paint these pieces before gluing them to the base, however.

## Varnish/Fixatives

After the entire figure has been painted and assembled, the fixative is applied. The best "fix" to use is spray fixative as this is easy to apply in very thin coats.

Place the figure on newspaper or a dropcloth and apply a thin coat of fixative to one side. Allow this coat to dry, turn the figure around and spray the other side. Once this coat is dry, turn the figure 90° and spray again. Rotate figure 180° and spray once more. Additional coats can be applied using this process.

Caution: Do not overspray the fixative as it will run. Also avoid too thick a coat as it may yellow over time.

## Other Techniques

**Dry Brushing** - This is a common technique for painting figures, particularly when painting a large number of figures. This is used primarily for adding highlights once the dark wash is complete. and is done by dipping an old brush into the paint and blotting it on a rag, toilet paper or paper towel until most of the paint has been removed. The raised areas are then brushed. Since most of the paint has been removed, this will apply small amounts of paint to create the highlights.

I generally do not use drybrushing as I prefer to build up the colours using shading techniques for a more realistic effect and this technique tends to destroy brushes.

## Additional Tips

- Don't rush, take your time. Good figures are always the result of patience and painstaking work.
- Experiment with cheaper figures before tackling a \$40 scene or a \$100 dragon.
- Be very careful with the finished figures. Although the fixative will take a certain amount of abuse, it will chip eventually, especially on metal figures.
- Plan out the colours and their order before beginning work on the model.
- Read about other techniques to learn more. For a start, here is a list of URLs for websites which contain info about painting and building miniatures:

<http://www.faqs.org/faqs/games/miniatures/painting-faq/>

Excellent resource for materials, equipment, techniques, etc. for both metal and plastic figures.

<http://www.paintingclinic.com/clinic/clinic.htm>

Wide variety of techniques, discussions of materials, tips for painting flesh, drybrushing, etc.

<http://ravensbranch.tripod.com/howto.html>

A long discussion of the types of paints and materials to purchase as well as some discussion on technique: particularly for sci-fi miniatures.

## Final Note

Painting miniatures is a hobby and not an exact science. Experiment with many different techniques to determine which ones work best for you.

To quote Richard Bach, "All of this could be wrong".