Colour Matching Gelcoat

Even if you have the manuafacturer's code to identify your gelcoat it will be very difficult to match that with new gelcoat - Your old gelcoat will have discoloured due to UV and dirt exposure, difference in gelcoat manufacturer, batch numbers and pigment supplier. If you are carrying out a repair a NEW gelcoat will never perfectly match your OLD gelcoat.

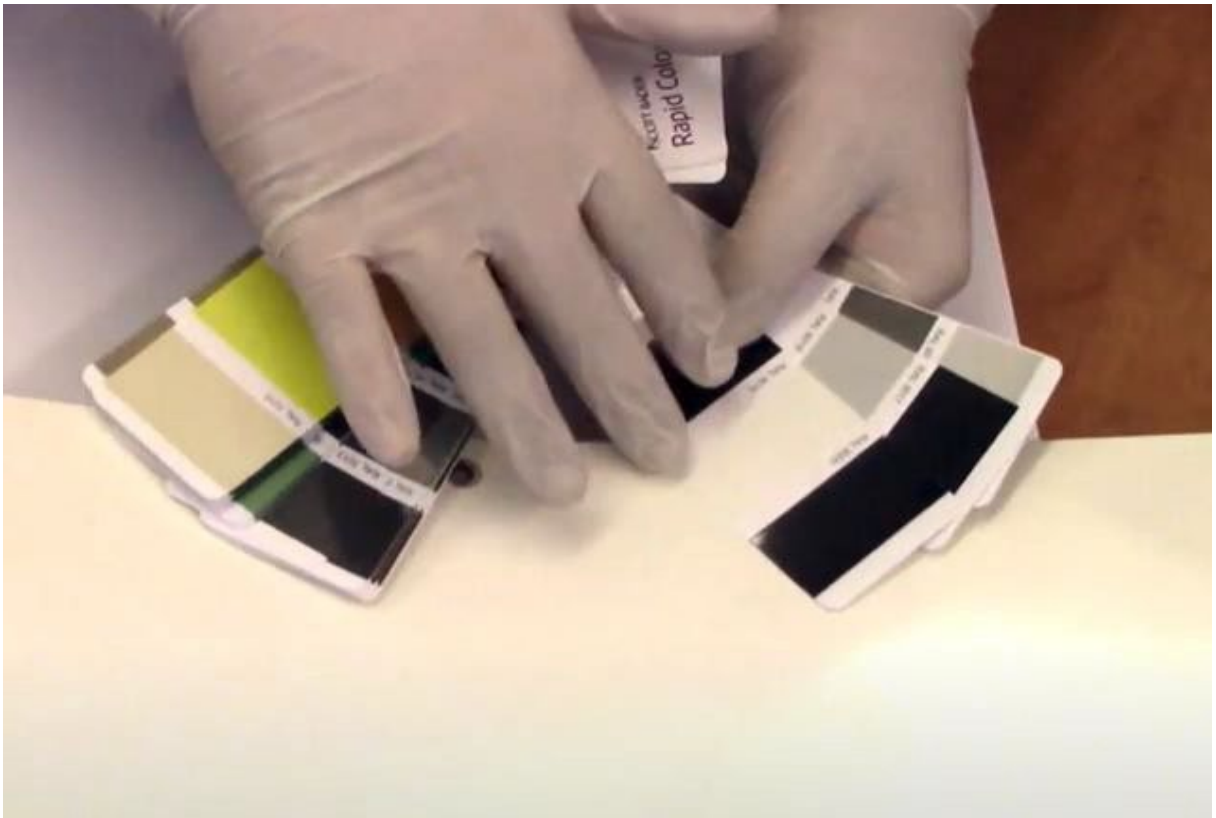
Identifying the colour

Unlike mixing paints, colour matching gelcoats with pigments can be tricky, but it is possible to get a close match.

Most gelcoat colours have a code commonly known as a RAL or BS number. In some cases, you may already have this RAL/BS number which makes the whole process much easier. You will notice that our website has a vast range of colour Ral colour Gelcoats as well as a small selection from the BS range.

If you do not know the RAL/BS number for your gelcoat it may be worth contacting the manufacturer of the product you are trying to match to. If you're lucky, they may have this and may even be able to supply you a small amount of the original colour if the manufacturer is still around and producing these, or at least the RAL code so that we can supply it.

If you cannot track down the manufacturer then RAL/BS charts can be used to offer up to your project to identify the colour or closest match possible.



A Ral colour chart being used to find closest match.

Unlike colour cards found in the paint industry, the RAL/BS books are not free issue and can be costly; usually averaging around £30-£40 from Boat chandlers, Marine Paint suppliers, eBay etc. This may not seem much to the professional boat builder or GRP fabricator who uses gelcoats on a large scale, but it is not very economical for a DIY user or hobbyist wanting one colour. We do however stock these charts for a more economical price than those found in Chandleries etc: RAL Colour Chart

Mixing and Matching colours by eye.

So, let's assume however you still can't find the colour you need, and you can't match the colour to anything on the chart. Not being able to match to an existing RAL/BS code can be due to the original colour fading from UV or simply a manufacturer has had a unique colour made for themselves. You may then have to attempt to re-create the colour.

It is possible to have panels to re-produce a close match, this is normally only economical if you are moulding a whole new project such as a hull, hatch covers, car panels etc and not just simply patching a hole. The reasons for this are due to the amount of base colour required to create the colour in the tinting machine, the company offering this service may require you to buy anything from 5kg-25kg of gelcoat as a minimum order which is far too much for a simple hole repair. The other reason is that they cannot guarantee a 100% match. The colour will look the same on a separate part but not exactly the same as a patch repair so that batch difference will stand out like a sore thumb once its flattened back and polished. This is the same with paints, if matching paint for a car for example the advice would be to spray the whole panel and not just try to touch up a small area.

So, it may be more economical for you to try and match a colour yourself especially if you only require a small amount.

Firstly, you will need to ensure the surface is clean so that you can be sure you are matching to the true colour of the part, if there are signs of fading then you may need to abrade slightly with 1500 grit paper then polish to a shine. This will hopefully remove the effects of UV and reveal the panels original colour before attempting your colour match.

Make sure you have good lighting too; natural day light is the best source for colour mixing.

Choose a coloured Gelcoat to use as a base, for example if mixing a cream or off white then you may wish to try starting with a white gelcoat as a base and slowly introduce a tiny bit of darker beige or brown until you notice the colour changing from white to cream.

Every now and then dab a small amount onto the part to check your progress.



Test colour mixes on fibreglass panel.

Try not to be impatient and add too much of the darker colour as it is more difficult to lighten the colour again due to the amount of white you will need to tone it back down.

Basically, you are doing the same as an artist would to create a colour match and you may in some cases need several colours to match. For example, you may find that your original cream panel has a slight greyish tinge, so you will then therefore need to add a bit of grey too.

Whites and off white shades are probably the hardest colours to match, here is a useful video on Gelcoat Colour Matching

Catalyst dosages and curing process may cause the repair to darken, so be prepared to have to grind it out and try again with a little more of the lighter base.

Mixing other colours using primary colour pigments

You can easily mix any polyester pigment colours together to make your own bespoke colour just like an artist does with paints. For example, if you have a range of primary colours, you can mix just about any colour such as a brown by mixing a red and yellow to make orange then adding small amounts of blue to turn it brown: -





This is ideal if you want to stock just primary-coloured pigments for any random gelcoat repairs you may carry out in the future. A good pigment colour range to have especially if you carry out patch repairs regularly are signal red, signal yellow, signal blue, black, and white. All available in 100g pots. These primary colours can be used to mix all kinds of secondary colours and shades to either add to clear gelcoat to make a solid colour or to tint whites to make off whites and creams.

Some information that may help current boat owner: -

Although there is no directory to refer to with colour codes used on boats, as there tends to be with cars, we have over time gathered some information after chatting to customers, scouring through forums, or supplying closest matches to past customers.

For whites and creams on old boats you may have to add more yellow, beige or even a grey to try and replicate the colour difference caused by UV or dirt and grime exposure.

Below is a list of colours we supplied and were successful for our customers bearing in mind the above info on tweaking colours. The below colours should be used as a starting point: we can't guarantee they will 100% match your project due to variations in UV etc.

Moody yachts used to use Scott Bader 337 white on a lot of their boats, according to most chats on the Moody yachts UK Facebook page and in the moody yacht association's website tech library.

Beneteau Boats used Ral 9016 which is a kind of off white.

The Ral 9016 will do for some of the **Late Mary fisher boats** too.

A past colour matching we also did was for a customer a **707-sailing dinghy made by hunter boats** Our Colour code 33596 kind of a very pale ice blue

3 colours have been matched in the past for a **Devon Yawl dinghy**: -

60044 which is a kind of greyish beige, 1860 pale to mid blue and 33593 which is a cream colour.

Formula boats (late 80s) light gey colour we did was 33594.

We also matched for a **Nicholson31** colour code 33597 kind of a pastel blue.

Southerly 100 1980s colour cream 33621

A quasar dinghy (not sure which model) creamy off white 33207

Discovery 55 Scott Bader's BS1643 dark blue

A cockpit coach roof of a **Parker 27 lift keel yacht** we supplied 60045.

Island packet 1999 SB 3973

Sailfish 1974 maxim marine never had a good enough sample to match but it is between RAL 9002 and RAL 9044

We have also managed to match cars and caravans.

A **Gardener Douglas sports car** Apparently, it's a Ral 5011 steel blue, but we've supplied RAL 5004 black blue as a better match in the past. May be worth having a clear gelcoat and getting both these pigments to try or mix between the two colours.

For **Swift caravan** repairs use Fiat white 249 BS3351

If you require pigments or gelcoats in any of the colours mentioned that aren't yet listed on our website, please contact us to order.

This advice and information are given in good faith for guidance only. And is given without warranty, users should determine information given and using their own judgment to determine suitability.

To reassure our customers - all materials supplied by East Coast Fibreglass Supplies are of the finest quality, manufactured by companies such as Scott Bader, DSM, Owens Corning to name but a few, who all have supplied materials into the Composites industry for many years on a global scale. Samples from every batch manufactured are retained for testing, should the need arise.