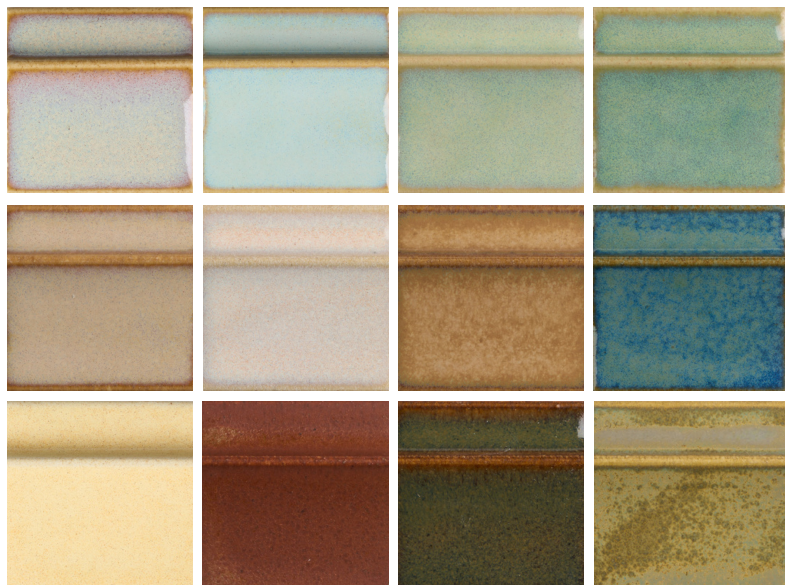


SO
GO

INSTRUCTION BOOKLET



HOW TO PREPARE BRUSH-ON GLAZES

Always wear gloves, an FFP3 dust mask and, if necessary, safety glasses when preparing glazes.

SOGO glazes can easily be made into brush-on glazes. For this, you will need a good brushing medium such as pehatine. It is available in the webshop.

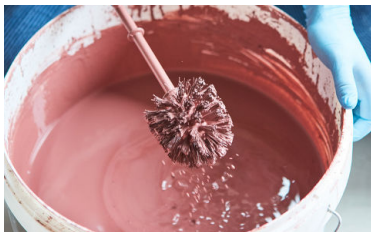
- First prepare a diluted pehatine solution. Mix 1 part pehatine with 2 parts water. For example, add 100 ml of pehatine to 200 ml of water.
- Pour the diluted pehatine solution into a container with a capacity of 1 litre. Use the amount of pehatine solution indicated on the label of each SOGO glaze.
- Carefully add the entire contents (500 g) of the glaze powder bag.
- Mix thoroughly with an immersion blender or stir vigorously with a brush for at least 90 seconds.
- Sieve the glaze through a 60- or 80-mesh sieve to obtain a perfectly homogeneous mixture.
- The brush-on glaze is ready to use immediately.



INSTRUCTIONS FOR DIPPING AND POURING

Always wear gloves, an FFP3 dust mask and, if necessary, safety glasses when preparing glazes.

- Weigh the amount of water specified on the SOGO glaze label. Pour it into a bucket with a capacity of at least 3 litres for 2 kg of glaze powder and 10 litres for 5 kg of glaze powder.
- Carefully add the entire contents of the glaze powder bag or shake the bag vigorously if you are only using a part of it.
- Mix the glaze thoroughly using an immersion blender (for small quantities), a paint mixer (for large quantities) or a brush.
- Sieve the glaze through a 60- or 80-mesh sieve to obtain a perfectly homogeneous mixture.
- Allow the glaze to rest for at least 24 hours before use.
- After the resting period, mix the glaze thoroughly again. Check the specific gravity and viscosity (see further).
- Adjust these parameters if necessary.
- The glaze is now ready for use.



MEASURING SPECIFIC GRAVITY

The specific gravity of a glaze indicates the ratio between water and solids in the glaze. Over time, it increases as water evaporates from the glaze, but also through the glazing process itself. Specific gravity is an important parameter and should ideally be measured before every dipping or pouring session. For brush-on glazes, the specific gravity remains much more stable and therefore requires less frequent checking.

- Mix the glaze thoroughly. It must be perfectly mixed to avoid mistakes in the measurement.
- Fill the tip of a large syringe with a small amount of glaze, avoiding air bubbles.
- Weigh the syringe and reset the scale to zero.
- Draw 50 ml of glaze into the syringe, avoiding air bubbles.
- Weigh the syringe again. This gives the weight of the glaze in grams. Record at least one decimal place.
- Divide the weight in grams by the volume in millilitres. This gives the specific gravity.

Compare the measured specific gravity with the value on the SOGO glaze label. Is it too high? Add a little water and measure again until you reach the correct specific gravity. Be careful not to add too much water. Is the specific gravity too low? Then your glaze contains too much water. Allow the glaze to settle and carefully remove some water with a syringe. Measure again until you reach the correct value. Always measure the specific gravity of a dipping glaze before each glazing session.

MEASURING VISCOSITY

A second important parameter for dipping glazes is viscosity, or how fluid the glaze is. A glaze that is too thin or too thick can affect the final glaze colour and may even cause running. Checking the viscosity of brush-on glazes is less important. In that case, the number of coats applied plays a major role in the development of the final colour.

Check the viscosity before dipping or pouring. Viscosity changes over time due to factors such as studio temperature. Measure the viscosity immediately after checking and adjusting the specific gravity.

- Mix the glaze thoroughly. It must be perfectly mixed to avoid mistakes.
- Fill a flow cup completely with glaze.
- Lift the cup and start a stopwatch as the glaze begins to flow.
- Stop the timer when the stream breaks or stops for the first time.
- Repeat several times and calculate the average flow time (in seconds).
- Compare your flow time with the value on the label.

If the measured flow time is longer than the value indicated on the SOGO glaze label, the glaze is too thick (too viscous) and must be deflocculated.

If the flow time is shorter, the glaze is too thin (too fluid, not viscous enough) and must be flocculated.



You can also check glaze viscosity without a flow cup. Dip a gloved finger into the glaze. Can you still slightly see the colour of the glove? Then the viscosity is correct. Does the glaze barely adhere to the glove? Then it is probably too thin and should be flocculated. Can you no longer see the glove at all? Then the glaze is too thick and should be deflocculated. This method is less accurate, but it does provide a good indication.

FLOCCULATING A GLAZE

Is the viscosity too low, the glaze too fluid, and the flow time shorter than the value indicated on the label? Flocculate the glaze with Epsom salts.

Use a saturated Epsom salt solution. Mix 100 g of Epsom salts with 70 ml of hot water and stir well. The salts will dissolve, although a small amount will remain at the bottom.

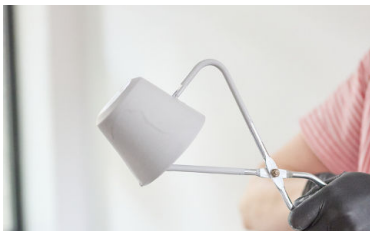
- Add a small amount of saturated Epsom salt solution to the glaze using a syringe or spoon. Depending on the glaze volume, you will only need a few drops to several millilitres. Start carefully and try not to add too much as this might lead to overflocculation.
- Stir well with a brush. You will notice that the glaze becomes creamier and thicker.
- Measure the viscosity again with the flow cup and repeat the steps above until you reach the value indicated on the SOGO glaze label.
- Have you added a little too much Epsom salt and has the glaze become too thick? No problem. You can deflocculate it (see further) to make it more fluid again.



DEFLOCCULATING A GLAZE

Is the viscosity high, the glaze too thick, and the flow time longer than the value indicated on the label? Deflocculate the glaze with Dolapix PC67.

- Add Dolapix PC67 to the glaze drop by drop. Be careful, it is a very powerful product. Depending on the glaze volume, you may only need a few drops or a few millilitres. Start cautiously and do not add too much.
- Stir thoroughly with a brush. You will notice that the glaze quickly becomes more fluid.
- Measure the viscosity using the flow cup and repeat the steps above until you reach the value indicated on the SOGO glaze label.
- Have you added a little too much Dolapix and has the glaze become too fluid? No problem. You can flocculate the glaze again (see before) and increase the viscosity.



APPLYING A GLAZE

Always make test pieces before glazing large batches of work. Take the time to get to know a new glaze before using it extensively to avoid disappointment. These tests do not have to be test tiles. A mug, cup or small plate works just as well.

ARE YOU USING A BRUSH-ON GLAZE?

Be sure to test different numbers of coats to see which gives the best result.

ARE YOU DIPPING OR POURING?

Take the thickness of the clay body into account. A thicker piece absorbs more glaze than a finely thrown piece. Glazing is a skill that takes practice, and practice makes perfect.

Be sure to watch the glazing tips in the instruction videos.



FIRING

SOGO glazes have been developed for low stoneware temperatures. They mature perfectly at cone 7 but can also be fired successfully at cone 6. Most SOGO glazes also perform well at cone 8. Check the label for more information.

With modern, well-insulated kilns, cone 6 and 7 can often be reached at a final temperature between 1200°C and 1220°C when using a slow final firing segment of 60°C per hour. Try the following simple firing schedule.

- 150°C/hour to 1065°C
- 60°C/hour to 1215°C
- Soak (hold the temperature at a certain point) for 10 minutes at 1215°C
- Uncontrolled cooling

Every kiln is different. You may need to adjust the final temperature of your kiln to achieve a perfectly matured cone 6 or cone 7.



Be sure to place witness cones (5½, 6, 7 and 8) on every kiln shelf to verify that you are firing to the correct cone. If cone 6 or 7 looks like in the photos below, your firing schedule and final temperature are correct.

Are cones 6 and 7 still standing upright? Increase the final temperature by 20°C and test again.

Has cone 7 melted flat? Then lower the final temperature by 20°C and test again.

NEED EXTRA BACKGROUND INFORMATION?

Perhaps my glaze book "Glazes Uncovered" is the book for you.



SCAN THE CODE FOR MORE
INFORMATION, FAQ, USEFUL TIPS AND
INSTRUCTION VIDEOS



THANK YOU FOR PURCHASING A SOGO GLAZE!

Making and using your own glazes is a little more complicated than working with a ready-made commercial brush-on glaze. Several parameters need to be controlled to achieve reliable and consistent results. This booklet explains how to prepare and use your glazes successfully.

The glaze powder can be used to make either a brush-on glaze or a dipping glaze.

Make sure to check the instruction videos on the website for more information. You'll also find a FAQ and useful tips there.



SCAN THE CODE FOR MORE
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