


Glazes – general note for processing

Our glazes, engobes, and underglaze colours are excellent products, made by  and, sometimes, by other European manufacturers, with reliable quality for potteries and industrial use. Since they are tested very well, the glazes reflect the desired, versatile colour effects.

However, the right application and processing of the glazes is indispensable for successful results. Some glazes are optimized for thin and, otherwise, some glazes are optimized for thicker application in order to achieve the desired results. For each glaze, the application notes are labelled on the glaze units and bags (only in German !) and mentioned in the article description (catalogue/web shop). Of course, the yielded effects and colours depend on multiple factors like

- the strength of coating
- the kind of application
- the firing temperature
- the firing conditions
- the colour and type of used body

As a result, deviations, in reference to the images, are possible.

Beginners are leaning to apply earthenware glazes on stoneware bodies which, naturally, results in a craquelling network of the glaze. Therefore, we recommend to use earthenware glazes for earthenware bodies and stoneware glazes for stoneware bodies. Unfortunately, after a longer period of use of earthenware glazes on earthenware bodies, the glazes can crackle, nevertheless. As a result, the pots are not dense any more. If possible, increase the temperature of the greenware firing, so that a dense body can be obtained. Afterwards, the glaze firing can be executed at lower temperatures. In this case, the glazing is slightly more difficult – in order to reduce the wet time of the glaze slip, the ceramic pieces can be pre-warmed (about 50°C).

Storage stability

Basically, our glazes offer an unlimited storage stability. However, different glazes contain alkaline or earth alkaline compounds. As a result, it could be possible that a crystallization in the slip occurs. Therefore, it's beneficial to mix only the amount with water which can be processed short term. The glazes which lean to crystallization are clearly labelled (see article description).

Glaze preparation

<i>Kind of Application</i>	<i>Lead-free Glaze</i>	<i>Leaded Glaze</i>	<i>Stoneware Glaze</i>
<i>Brushing</i>	550-650ml/kg	400-550ml/kg	650-750ml/kg
<i>Pouring/Dipping/Spraying</i>	650-850ml/kg	450-550ml/kg	750-1000ml/kg

Note: Firing terms

Our glazes have been fired in the following manner:

<i>Bisque Firing</i>		<i>Glaze Firing</i>	
<i>First Ramp:</i>	100°C/h up to 600°C	<i>First Ramp:</i>	240°C/h up to 600°C
<i>Second Ramp:</i>	Skip – 100% power up to final temperature	<i>Second Ramp:</i>	Skip – 100% power up to final temperature
<i>Dwell Time:</i>	20 min.	<i>Dwell Time:</i>	30 min.
<i>Cooling:</i>	naturally	<i>Cooling:</i>	naturally

Basic notes

Lead-free – Labelling-free

We have labelled our glazes as lead-free/ labelling-free if the formulations contain no lead-containing compounds (technically unleaded), and the percentage of other ingredients with labelling obligation is below the legal regulations. In fact, this does not mean that the glazes are suitable for tableware use. Unfortunately, a lot of unleaded glazes are not acid or base resistant. The existing of fruit acid results in an etching of the glazed surface (optical problem). Tableware use (in regard to the fired glaze) is independent of the labelling obligation (in regard to the raw/ unfired glaze) !

Acid resistance

We have determined the acid resistance by laying a glazed sample into acetic acid (25%) for a period of 24 hours. Glazes which are not acid resistant show an etched surface, sometimes with colour deviations. In a couple of cases, the glaze surface has been totally peeled of. In other cases, the glaze surface is slightly more pale and dull as the untreated glaze.

Leaded or cadmium-containing glazes are definitely untested. The reason for this proceeding is that the acid resistance strongly depends on the firing conditions (temperature, body, vapour of other glazes/ kiln lining). If it is considered that lead- or cadmium-containing glazes are to be used for tableware, then the ceramic manufacturer must carry out these tests:

The suitability of a cadmium- and lead-containing glazes for tableware use is tested according to the Ceramic Requirements Ordinance of 21.03.88 on the concrete object of utility (DIN 51031). In this application, the dissolution of lead and cadmium from the fired glaze of the final product will be determined. The limit values for the various objects are listed in DIN 51032. The measurements are carried out by authorised laboratories.

Safety instructions

- Avoid dust formation
- During the glaze processing not drinking / eating / smoking
- After glazing clean the hands accurately
- Don't swallow glazes, and keep it away from foodstuff
- No toy for children - keep children away without assistance
- Take care of an adequate ventilation during the firing process