

Schmincke oil colours and their drying times

Oil paints are characterized by long drying times due to their "oil" binder system. Two factors essentially determine the drying behaviour of the colour: oil and pigment.

The influence of the binder "oil" on drying

Oil colours mainly consist of pigments and binders. The binders of the oil colours oils of natural origin, such as linseed oil, poppy oil, safflower oil and sunflower oil. They differ in drying time and possibility to yellow. Pure oil colours dry by oxygen absorption from the surface to the painting and therefore remain "open" for a long time in comparison to other artists' colours such as watercolour, gouache or acrylics.

The process of oxygen absorption and the associated chemical reaction are of utmost importance to get a perfect film. This process depends on the type of oils used, the pigments, the painting ground, the climatic conditions and the layer thickness of the paint applied. Oil colours take days to dry and several months to fully dry, depending on the layer thickness.

The influence of pigments on drying

In addition to the oils used, the pigments used have a major influence on the drying time of the oil colour. There are pigments such as cobalt, iron cyan blue, natural earths and transparent iron oxides that accelerate the drying process. Colours with these pigments dry correspondingly quickly within 1-2 days. Other pigments, such as carbon black, indanthrone blue or dioxazine, however, delay the drying process. Colours such as lamp black or deep purple therefore have comparatively long drying times (approx. 14 days). Titanium and zinc pigments in the white range lie in the medium drying time of 3-5 days. The information refers of course to an average layer thickness when applying the colour. Thicker layers of colour take correspondingly longer. Again, oil colours are fully dried just after months.



Series-specific differences

Of course, Schmincke makes sure that the drying times within one series (e.g. MUSSINI® or Norma®Professional) are reasonably harmonious. However, differences can be found across the series. Why?

The higher the pigment concentration of a colour, the stronger the influence of the pigment on drying. In the premium ranges MUSSINI® and Norma® Professional the pigment concentration is considerably higher than in AKADEMIE® Oil color or College®Oil; the influence on drying times is therefore correspondingly higher.

Influencing the drying time of oil colours

There are several ways to influence the drying of oil colours. You can add accelerating drying mediums such as drying accelerator (50036), MUSSINI® Medium 3 (50040) and Rapid Medium (50041) to the oil colours. If you would like to extend the drying time, on the other hand, use the Schmincke MUSSINI® Medium 2 (50039).



The described product attributes and application examples have been tested in the Schmincke laboratory. The information is based on our current state of technical findings and experience. Due to the diversity of applications in terms of painting techniques, materials and working conditions, as well as numerous possible influences, this information is based on a general application range. A legally binding guarantee of specific attributes or the suitability for a specific usage purpose cannot be derived from our information; therefore the use of the products must be adapted to the users' individual conditions and tested in trials. For this reason, we cannot provide

a warranty for product attributes and/or assume liability for damages that occur in connection with the use of our products.

By the way: Specifics for handling and product safety you will find on our website www.schmincke.de (e.g. download/safety data sheets).

For special questions please don't hesitate to ask our team in the lab!

The best way to get in contact with them is via mail at:

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