Product information
Oil colours

Working with paste-like oil colours

Many creative artists constantly break all the known rules of painting and apply oil colours directly in thick layers. In the following, we will explain why this is not optimal – even if in some cases it seems to work well:

Common raw materials used for oil colours
The classic oil colours such as NORMA® and AKADEMIE® are normally made from the following ingredients:

- Drying/semi-drying vegetable oils as binder
  - o linseed oil
  - o sunflower oil
  - o safflower oil
- Pigments as dyestuff
  - o inorganic/organic
  - o natural/synthetic
- Additives
  - o oil-drying agent (siccative)
  - o wax as a consistency agent

The traditional MUSSINI® resin oil colours also contain a specific ratio of dammar, a natural resin preferred by the the old masters.

Since all of the pigments have different binder requirements, differing amounts of oils are needed for creating a colour paste with a constant consistency, even when using professional triple roller mill. This means that every shade of our MUSSINI®, NORMA® and AKADEMIE® artists' oil colour assortment is manufactured according to an individual formula, carefully developed in our own laboratory.

Vegetable oils for Schmincke oil colours
Primarily, a higher ratio of linseed oil is used for the production of all the shades of oil colours. All of the white shades – with the exception of "underpainting white" – use oil combinations with a higher ratio of sunflower and safflower oil. This is due to the following application-related aspect: Of all vegetable oils, linseed oil has the best drying properties, however it tends to yellow significantly, particularly in the dark. In contrast, sunflower and safflower oil are not only lighter in a fluid state, but also yellow much less intensely when stored in darkness. However, even if siccatives are used, they have a longer drying period and they form a softer film than linseed oil.

Drying oil colours
Drying of a pure oil colour is a complex and time-intensive chemical process, during which the vegetable oils react to atmospheric oxygen and cure. This happens first on the surface and causes the formation of a skin, which also has an insulating effect on the layers that lie below. The drying process of all the underlying layers may take several years, if the paste-like colour was applied thickly. This causes a tension within the painted layers, which more than rarely lead to surface damage – either in the form of cracks or wrinkles. But even thinly applied layers of oil colours often need weeks until they are completely dry. Therefore, our recommendation is not to varnish oil paintings until waiting for a period of at least 8 to 12 months!

Important mediums for painting with oil colours
Some painting techniques require the use of special mediums. They enable the optimal adjustment of the specific properties of the colours to create an individual application method. For working with paste-like oil colours, a product called Megilp (50 034) has been approved for many years. It accelerates the drying process and facilitates the complete drying of thickly applied layers.

A comprehensive overview of Schmincke's most important oil painting mediums and their basic characteristics can be found in the following table:

Product name	Item no.	for thinning	accelerates drying	retards drying	increases transparency	improves gloss	stabilises consistency	improves flow
Medium N	50 045	x						
MUSSINI Medium 1	50 038	x	x					
MUSSINI Medium 2	50 039			x		x		
MUSSINI Medium 3	50 040		x			x		
Medium L	50 042		xx		x	x		x
Siccative de Haarlem	50 022		x					
Transparent paint medium	50 053				x	x		
Transparent gel	50 037				x			
Megilp	50 034		x				x	
Rapid Medium	50 041		xx		x	x		
Drying accelerator	50 036		xx					

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The impact of the substrate on the stability of an oil painting
Please note that the stability of a painting is not only dependent on the selected paints and aids. The substrate and the applied primer also play a significant role. Particularly when painting with oil colours, the substrate needs a specific level of absorbency. When using a strongly absorbent substrate, there is a risk that too much bonding agent will be absorbed into the substrate – as with a sponge. The applied layers of colour lose not only their binding agent and glossiness, but also become less flexible. Conversely, if the substrate has insulated too much, the curing process of the oil colours is impeded. Particularly when using a paste-like application method, it is important that a flexible substrate such as a canvas is not stretched too tightly.

Due to the multitude and diversity of painting materials, substrates and techniques, we recommend that our customers carefully test their selected products in advance with regard to their personal painting technique.

In addition: If you have additional specific technique-related questions on this topic, our Schmincke lab-team is happy to be of assistance! You can contact the lab-team by email at laborteam@schmincke.de or by telephone at +49 (0)211/2509-476.

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.
Ideally, oil colour should be applied in thin layers. For paste-like palette knife techniques or "Prima" painting, we implicitly recommend the use of Schmincke Megilp (50 034). It accelerates the drying time for thick layers of oil colours and reduces the risk of cracks or other types of damage.

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