

## 62200 Beeswax natural

A product of excretion from the wax glands of bees, which hardens quickly when cold and is used as a building material for honeycombs has also been used by humans for many purposes since time immemorial.

In painting, not only the encaustic technique is significantly based on beeswax. There are numerous cases where wax in paste form, either as an additive or as an independent coating, is highly valued.

It is usually due to ignorance of the very different varieties to be found in terms of origin and extraction varieties, if the effect of beeswax disappoints now and then. One must therefore its origin somethingtrace. One finds occasionally data, the wax of virgin bees is the best. Virgin bees do not. What is meant by this designation is a wax freshly produced by the bees, still in its original and before it has been coated with chrysin by the bees and comes from unincubated combs.

Such a wax from fresh honeycomb looks almost pure white and does not yellow at all during aging. If honeycombs have been incubated several times or have repeatedly served as a honey store, they take on a more and more and more yellowish coloration, until this finally changes into a dirty brown. With the European like with the Australian beekeepers, who for reasons of rationalization prefer the frame construction method in "hives", only little fresh wax accumulates; because one gives back to the bees as long as possible their old, laboriously built honeycombs to the further use. Only when they have become dirty yellow and dark, the beekeeper melts them together. In the process, the wax, whose melting point is between 60° and 65° C, must not be heated much higher. According to the old custom, this is sometimes still done today in so-called lost wax casting boxes. These are flat wooden boxes, hinged, covered with glass, and mounted on a pole at an angle so that the sun shines on the honeycombs can act favorably on the honeycombs laid out in them. In a compartment partitioned off at the lower end collects the very slowly melting wax collects in a compartment at the bottom and is removed from there after cooling. It then looks yellow-grey to dark yellow.look. This is how you get it from the beekeeper. In the wax factories it is melted again and washed out.

Wax is in itself odorless. What the layman refers to as a typical wax odor are residues of chrysin and propolis, a dark brown putty resin that the bees need for building. Such yellow raw wax in a soft state has certain adhesive power when heated gently. The restorer increases this strength by adding rosin and needs this mass in the hot doubling process or for laying down layers of paint on paintings and sculptures. The painter is disturbed by the chrysin and propolis residues due to the sometimes strong yellow and dark and dark inherent color and the relatively low hardness of the yellow raw wax. He prefers the lightest possible light-colored product. This can be obtained in various ways.

In practice, one has to rely mainly on bleached wax varieties. In the past, one was limited to natural sun bleaching natural sun bleaching, in which a starting material, already as light as possible, was poured out in a thin layer and exposed to the sun for a longer period of time. Under glass protection, the bleaching process lasts 4-5 times longer. The wax factories today are chemical bleaching processes by boiling with sulfite-containing water, to which a chlorinated lime solution is added until the wax is decolorized.

### Recipe for wax ointment

1 part by weight beeswax, bleached  
2 parts by weight turpentine oil

The wax is sprinkled in turpentine oil and gently heated in a water bath until the wax is completely dissolved. The water bath must be as spacious as possible to prevent the turpentine oil from splashing out onto the hotplate or into an open gas flame since the danger of fire is quite great and burning wax is difficult to extinguish.

### Recipe for hardened wax ointment

2 parts by weight bee wax, bleached  
1 part by weight carnauba wax, bleached  
6 parts by weight turpentine oil

The beeswax is first sprinkled into only half the amount of turpentine oil and dissolved in the water bath.  
The carnauba wax is dissolved in the other half of the turpentine oil quantity, also in a water bath.  
Both solutions are poured together, stirred intimately and also stirred several times during cooling.  
Source: "Materials and Techniques of Painting" (1967) by Kurt Wehlte

Solubility: in turpentines and aromatics, e.g. 70010, 70100, 70108, 70109, 70150, 70500, 70503, 70520, 70920

### Technical data:

CTFA: Cera flava  
CAS-Nr.: 8012-89-3  
EINECS: 232-383-7

Color:	yellowish
Form:	Pastilles
Melting point:	62 - 65°C
Acid value:	16 - 24 mg KOH/g
Saponification value:	85 - 104 mg KOH/g

Store in closed containers, protected from light and at temperatures not exceeding 30°C.

The above information reflects the results of our quality tests. They do not imply any legal assurance of specific properties of the product or its suitability for a specific application.