

## 12400 - 12402 **Sepia**

Sepia C.I. Natural Brown 9, frz.: sépia, from the sepia or cuttlefish

The ink sac of *Sepia officinalis* from the family of the Sepiidae supplies a brown dye called Sepia.

Whenever the Sepia (fish) feels threatened it releases the dark inky fluid.

The complete ink sac can either be dried or the ink can be pressed out of the still living squid. The fluid then is dried and ground to powder.

Dried sepia contains approx.

78% melanin

10% calcium carbonate

7% magnesium carbonate

2% alkaline sulphates and chlorides and

0.8% miscellaneous compounds.

Melanin consists of a group of black pigments widely distributed in the animal and vegetable kingdoms, e.g. in hair. The constitution of these pigments has yet to be determined. The sepiomelanin present in sepia is soluble in warm caustic potash to a brown solution from which it is precipitated by hydrochloric acid or sulphuric acid, but not by nitric acid, it is soluble in ammonia. It is a macromolecule (probably a mixture of macromolecules).

Seydelmann (1750-1829) – a German painter - of Dresden is said to have been the first to extract the dye with potassium hydroxide, filter it, and precipitate it with hydrochloric acid, thereby achieving a higher concentration.

The colour of the pigment is brown-black.

The pigment is mainly used for water-colors, because of its translucency. It may fade after two year's exposure to light and air.

### **Sepia – The Ink**

The Sepia pigment is ground in shellac soap according to an historic recipe. The shellac soap makes the ink waterproof on drying.

Sepia is a very dark brown, almost black in full strength.

Nowadays many “Sepia”-products are made of synthetic material due to the fact that the genuine, natural Sepia is not very lightfast.