

PIGMENT

*Written by MRS 1942
from encyclopedia*

Opaque white or colored powder used to mix with drying oils, varnish, etc. to supply the decorative function of paints, enamels, etc. The ancients used natural earth colors -- minerals, vegetable dyes, burnt bone, etc. as coloring pigments. Some of these were very good, as indicated by prehistoric cave pictures and the decorations on mummy cases.

Modern chemists have developed colors much more brilliant, opaque, and permanent, possessing the highest degree of fineness and miscibility with vehicles.

The principle white pigment is lead carbonate which has been used for centuries, was first developed by the Old Dutch Process, which was patented in 1622. Others are lead sulphate, oxide and sulphide of zinc, titanium, and antimony oxide, and lithopone (a compound of zinc sulphide and barium sulphate).

The chief blacks are lamp black (soot from incomplete combustion of oil), carbon black (from natural gas), charred bone or ivory blacks, graphite (natural or artificial).

Of the blues Prussian or Chinese blue, Ultramarine, and cobalt blue are most widely used. Phthalocyanine blue, an English discovery of a new type far surpassing any blue previously made.

For yellow natural yellow ochre and precipitated yellow iron oxide are common, but lead or zinc chromate yellows supply most of the demand. The organic "Hansa" yellows are very clean, strong, and permanent.

Chrome green is a combination of Prussian blue and chrome yellow. Phthalocyanine blue and "Hansa" Yellow are used to produce a very permanent brilliant green. Chromium oxide is much used.

Iron oxide and red lead are largely used as a protective coating over steel. Organic para and toluidine reds supply demand for brilliant permanent colors.