23000  Phtalo Green & 23010 Phtalo Green yellowish

23000: Pigment Green 7, C.I. 74260
23010: Pigment Green 36, C.I.74256

One might simply call the color of Phthalo Green dark cyan. It corresponds to a large extent to that of chrome oxide hydrate green, however it is darker and purer, and can be more bluish in tone. Phthalo Green mixed with white is more brilliant than chrome oxide hydrate green. For some time now we also offer a somewhat yellowish variant with the number PG 36.

Like Phthalo Blue the appropriate green belongs to the group of the Phthalo pigments. They are derived from the Phthalo acid, a complex circular organic compound, halogenated, with a copper atom in an extremely stable position. Phthalo Green PG 7 additionally contains chlorine in the molecule, PG 36 chlorine and bromine. The halogenation causes the green colour (Phthalo Blue contains no halogens). With more bromine, the pigment is more yellow. Since the central copper atom is firmly built into the structure, the restrictions which apply otherwise to cupreous pigments do not apply to these pigments.

In order to find out whether it actually is a Phthalo color you can use a simple method. Take a knife tip of the pigment and add a drop hydrochloric acid. Put this mixture into the flame of a blowtorch or a Bunsen burner. If the material contains copper, the flame shows an intensive turquoise color.

Phthalo green is absolutely light-fast, solvent steady and weatherproof, has strongly glazing characteristics and is suitable for all techniques. It is stable in acid, lime and alkali. Phthalo green is sold under different designations as finished artist color. The higher the grade, the less additives it contains. If one buys the pigment from a manufacturer of artist color, then it is usually mixed with Barite. This happens surely from cost reasons, on the other hand for reasons of easier workability.

To process pure pigment requires special guidelines. A previous moistening with isopropyl alcohol is recommended for the production of colors on aqueous basis. The production of oil color does not need a previous moistening. In each case after the mixing it must be made smooth with the glass muller, or by grinding in a mortar. The pigment is very intensive. By addition of smaller quantities of white the opacity is ensured, and the colour changes only imperceptibly.
Raman spectrum of 23010:
(Source: MR PHSG, 2017)