Labshop Chemicals Restoration Art Supplies

K4571 Cobalt Blue, medium

Cobalt blue is a relatively new pigment. Discovered by Leithner in 1775, it was not industrially produced until the early 19th century. Since then it has become indispensable in all artist colors including pastel, because of its characteristic soft, yet strong hue, which tends a little towards the azure. It is particularly beautiful in water-based media, where the dark shades can be diluted to a light blue.

In oil colors it is mixed with a light oil, such as poppy or walnut oil, to prevent the greening effect that the stronger yellowish linseed oil would produce. Its natural drying effect offsets the slow drying quality of those oils. Due to its particle weight, it tends to separate from the oil which can cause difficulties in tubes. Adding filler or beeswax can offset this drawback, but it is best made up fresh. When grinding the pigment, one must be careful to not add too much oil. If the paste turns liquid, a little more pigment must be added. There is a fine balance of adding just the right amount of oil, which only practice can reveal.

Its wetting properties in all media are good, its hiding power and tinting strength moderate.

Cobalt blue is the most expensive pigment of those commonly used today. It is however the only absolutely lightfast and weatherproof blue which makes it an ideal pigment for fresco painting. This together with the irreplacable visual experience created by its soft hue make it a favorite classic among artists.

We only deliver the finest quality.

Chemical Composition:	Co-Al Oxide Spinel
Color Index:	Pigment Blue 28, C.I. 77346
CAS No.:	1345-16-0
EINECS No.:	310-193-6

Data	Specification	Within specification / Value
Oil absorption	$37 \pm 5 / 100 \text{ g}$	
Loss on drying	< 0.5 %	
Sieve residue (45 µm / 325 mesh)	< 0.1 %	
Tinting strength to standard	100 ± 5 %	100,67
DE to Standard	DE < 1	0,54

Purity Criteria (measured according to DIN 53770 with 0,1 N HCL):

- Lead	0.01 %
- Arsenic	0.01 %
- Mercury	0.005 %
- Selenium	0.01 %
- Barium	0.01 %
- Chromium	0.1 %
- Cadmium	0.01 %
- Antimony	0.05 %