



Sanodal[®] Black GL Paste

Sanodal Black GL Paste is a homogeneous, water-soluble dye which is distinguished by high fastness to light and weather.

Sanodal Black GL Paste is suitable for interior and exterior architectural purposes.

1. Dye-specific data

Shade:	greenish black; at low concentrations bottle green shades
Appearance:	black paste
Chemical character:	homogeneous azo metal complex dye
Density (20°C):	1150 g/l
Solubility in water:	miscible
Storage stability:	at least 1 year in closed containers between 0°C and 50°C
Ecotoxicological data:	see Safety Data Sheet.

2. Application conditions

	Concentration	Dyeing temperature	Dyeing time
Bottle green shades Standard layers (12µm)	0.1 - 10 g/l	25 - 60°C	10 - 20 min
Black dyeings Standard layers (12 µm)	30 g/l	55 - 60°C	15 - 20 min
Sanodal layers (25 µm)	30 g/l	55 - 60°C	30 - 40 min

pH:	5.5 ± 0,5
Buffer:	The dyebaths are preferably buffered with 8 g/l sodium acetate trihydrate + 0,4 ml/l acetic acid, pH 5.6
Water quality:	preferably deionized; dyeing is also possible in tapwater, but this can reduce the service life of the bath
Sealing:	preferably with Sealing Salt ASL (one or two stage).

3. Setting the dyebath

Before using, the content of the barrel has to be stirred in order to homogenize the paste. When preparing the dyebath care must be taken that the dye is well dissolved. The dye can be dissolved in deionized water in a separate container (5 parts water to 1 part dye). This stock solution is then stirred into the dyebath.

4. Lightfastness of the dyeings

Sanodal Black 3GL Paste is distinguished by outstanding lightfastness.

Lightfastness of **Sanodal** dyeings: rating > 9 (ISO 2135).

5. Special remarks

- Unsealed dyeings are virtually unstrippable in diluted nitric or sulphuric acid. They can be stripped in nitric acid 10 % + potassium permanganate 5 %. After the treatment in Potassium permanganate, neutralization must be carried out for 1-5 min in a sodium bisulphite 5 % solution.
- The dyebaths are sensitive to sulphate and aluminium; anodized objects should therefore be rinsed thoroughly before dyeing.

6. Disposal of the dyebaths

Spent dyebaths must be disposed of; e.g. with **Anodal WT-1 Liquid**. The precipitation method is described in detail in the Technical Information bulletin for **Anodal WT-1 Liquid**.

The table below shows the additions required for precipitating **Sanodal Black 3GL Paste**.

Precipitation method	FeCl ₃ , 40 % ml/g dye	Etching lye ml/g dye	Anodal WT-1 Liquid ml/g dye	Residual dye in the filtrate mg/l	Cobalt content in the filtrate mg/l
A	1.0	-	0.4	< 1	< 0.2
B	1.0	-	0.4	~ 60	< 1.0
C	-	0.5	0.8	~ 30	< 1.0

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The information and recommendations presented here were compiled with the utmost care, but cannot be extended to cover every possible case. They are intended to serve as non-binding guidelines and must be adapted to the prevailing conditions.