

Purification of tin solutions using Flocculant F M N Concentrate and Phosphoric Acid

In acid tin and tin lead plating solutions, the tin is normally found in the stannous (Sn^{2+}) form. However, in operation it is impossible to prevent the oxidation of stannous into stannic (Sn^{4+}) form. In Schlötter products, the oxidation process is retarded by the use of special additives but cannot be prevented completely. In sulphate based solutions e.g. CULMO, Sn(IV) hydroxide is formed as a fine colloidal suspension. The suspension does not completely settle out and the solution remains turbid. Filtration of the solution causes problems as the filter media soon block and in practise it is not possible to completely filter out the suspension. Usually this turbidity does not have any negative effect on the operation of the bath but sometimes it is advisable to clarify these solutions. Addition of the Flocculant FMN Concentrate (AN 109405) coagulates the precipitate to a state which settles fast and can be easily filtered.

The information in this data sheet is based on laboratory as well as practical experience. Figures quoted for operating limits and replenishment quantities are for guidance. Actual values necessary will depend on the components being plated (material and geometry), their application and plating plant conditions.

Important:

Please read this instruction carefully prior to the use of the process and carefully follow all the parameters that have a direct influence on the operation. We reserve the right to make technical changes. In the interest of safety, please pay attention to the hazard warnings on the labels of the containers. The minimum shelf life of the products is included on the labels and is also available in the appropriate Quality Assurance (QA03).

The current IMDS number of the layer deposited from the process is available on the internet at www.schloetter.com/downloads.

For the storage of chemical products the TRGS 510 must be followed.

If the additives used in this process contain a SVHC-substance, then this will be specified in the corresponding Material Safety Data Sheet, section 15.

