

# Bright Tin GF 20 1

Bright Tin GF 20 1 is an organic acid-based fluoride- and formaldehyde-free process for the deposition of bright tin coatings. Solderability of the tin coatings is excellent, even after accelerated heat ageing at e.g. 155 °C for about 16 hours. The deposits aren't sensitive towards fingerprints.

Bright Tin GF 20 1 can be used for the deposition of bright tin coatings in rack installations and at reduced metal content for bulk articles in barrel plants in the field of electronic- and electrotechnical component finishing as well as for printed circuit board (PCB) manufacturing.

A make-up of Bright Tin GF 20 1 with a special developed tin additive, as far as possible avoids sticking together of small electronic components (ceramic chips).

Glass, ceramic or titanium aren't being attacked since the electrolyte doesn't contain any fluoride. Titanium anodes hooks may be used for contacting of the anodes if drag-in of fluoride ions or complex fluoride ions is prevented.

If required the Bright Tin GF 20 1 can be operated as a tin-lead electrolyte by adding Lead Concentrate FP (see technical data sheet BATH 11222-E Tin-Lead SLOTOLET G 20 1).

This process is applied if sulphuric acid-based electrolytes cannot be used, e.g. if a crossing of tin-lead electrolytes is unavoidable due to plant-specific reasons.

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 these instructions carefully and follow recommendations given. We reserve the right to make technical changes as necessary. In the interests of safety, please pay attention to the R- and S- phrases on the labels of the containers. The minimum shelf life of the additives is printed on the label of the container. The current IMDS number of the layer deposited from the process can be found on the internet at [www.schloetter.com/downloads](http://www.schloetter.com/downloads).

For the storage of chemical products only the TRGS 514 and TRGS 515 regulations must be followed. The Hazardous Goods Regulation (ADR/GGVS) is only valid **for transportation** and must not be applied to storage.

