

# Nickel Sulfamate MS

Nickel Sulfamate MS is a process for the deposition of nickel layers with low internal stress at high achievable deposition rates.

This makes the process ideal for the electro forming process, for thick nickel coating in tool-making and engineering and in some branches of the electrical industry.

The electrolyte is also excellent for use in reel-to-reel applications. Application of high cathodic current densities as well as exceptionally ductile deposits, are the features of this process.

In reel-to-reel applications the electrolyte is made-up and operated in two variants.

**Variante 1** is the most frequently applied variant and is used if high cathodic current densities are required.

**Variante 2** is applied if lower cathodic current densities up to approx. 15 A/dm<sup>2</sup> are required.

The electrolytes are operated without organic additives, so semi-bright coatings are deposited.

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](http://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.**

