



ANODAL® MTS PLUS

Anodal MTS Plus is a NPE-free nickel acetate mid- temperature seal product. As compared to conventional high temperature sealing methods the use of *Anodal MTS Plus* can provide substantial savings, not only in energy consumption but also in heating and exhaust equipment requirements. Seal baths containing *Anodal MTS Plus* can be readily clarified by filtration. *Anodal MTS Plus* is compatible with Anodal MS-1A liquid, a surfactant package that, as the bath ages, can be added in small amounts to avoid the onset of seal smut formation.

APPLICATION CONDITIONS:

Concentration:	>1.5% vol (typically 2-3%)
Temperature:	> 160F (higher temp requires shorter time)
pH:	5.2 – 6.0
Immersion time:	5 - 20 minutes
Filtration:	Recommended

PRECAUTIONS:

To prevent seal failures it is important that the anodizing conditions be kept within normal limits, especially as to temperature and current density. Silicates and phosphates are known bath contaminants.

ANALYTICAL PROCEDURE:

1. Pipette a 25 ml. sample into a 250 ml flask.
2. Add 50 ml of de-ionized water.
3. Add 15 ml of concentrated ammonium hydroxide.
4. Add a few grains of Murexide indicator.
5. Titrate with 0.1M EDTA to a permanent purple-violet color.
6. Record the volume of EDTA required.

Calculate: **Anodal MTS Plus (% vol) = EDTA (ml) x 0.67**

Recommendations, notices or instructions as to handling, use, storage or disposal of this product, including its use alone or in combination with other products, or as to any apparatus or process for its use are based upon information believed to be reliable. No liability is taken with respect to any such recommendations or instructions. Sole and exclusive warranty is that products comply with published chemical and physical specifications as provided on the certificate of analysis. No other warranties, either express or implied are given.