

## Scharlab S.L.

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# **CERTIFICATE OF ANALYSIS**

Product Manganese, standard solution 1000 mg/l Mn for AA

Batch 18204901 Quality release date 13/07/2017

(manganese nitrate in nitric acid 0,5 mol/l)

Expiry date 07/2020

MA0111 Analysis

Expiry date

Concentration

Batch value 1000 mg/L Specifications

995,0 - 1005,0

#### **Preparation**

This atomic absorption standard has been prepared using gravimetric and volumetric procedures. Composition per litre is 4,57 g Manganese nitratre tetrahydrate in Nitric acid 0,5 mol/l

#### Traceability

This standard is traceable to Standard Reference Material from NIST. SRM 915b Calcium carbonate

#### Uncertainty

It characterises the dispersion of the values that could be attributed to the mesurand. The limits of the expanded uncertainty are given at a confidence level of 95% (k=2).

#### Measurement

The batch value is determined by direct complexometry titration at  $20^{\circ}$ C, by means of spectrophotometric-end-point. Batch value certified at the time of measurement.

### Storage and use

For AA spectrophotometer calibration

If the product is stored and unopened, this solution is stable for 3 years from the date of manufacturing.

Once the bottle is opened, keep tightly closed at room temperature. Avoid exposure to light.

We suggest rejecting the solution six months after opening

This solution should be checked periodically by the user.

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