



**Starting material, purity (Lot N):**

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	NaClO <sub>2</sub> 99.999%	NaClO <sub>2</sub> -84224279
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**Density:** 0.999 g/cm<sup>3</sup> at 20 °C

**Minimum shelf-life:** 03.2014 (unopened bottle in aluminized bag)

**Date of opening:** .....

(Recommended period of use should not exceed 12 months from date of opening.)

**Intended use:**

***For Laboratory Use Only***

This CRM is intended for:

Calibration of spectrometers Ion Chromatographs

Validation of analytical methods

Preparation of "working reference samples"

Detection limit and linearity studies

This statement is not intended to restrict the use for other purposes.

**Instructions for the correct use of this reference material:**

This certified reference material can be used directly or can be diluted in an appropriate high-purity matrix. Only a clean class A glassware should be used. Do not pipet from container. Obtained concentration (in mg/l) after dilution is a result from the multiplication of certified value of CRM concentration and the CRM's volume used for dilution and divided into the flask's volume used for dilution.

**Stability and storage:**

This CRM is with a guaranteed stability until  $\pm 0.5\%$  of the certified concentration within its shelf-life. Stability is guaranteed provided that the solution is kept in its original packaging, tightly closed under normal laboratory conditions. According to an in-house procedure the producer will monitor this CRM at appropriate intervals and the purchasers will be notified of any significant changes resulting in recertification or with withdrawal of the CRM during the state period of the validity of the certificate.

**Hazardous situation:**

The normal laboratory safety precautions should be observed when working with this RM. Further details for the handling of this RM are available as safety data sheet.

**Level of homogeneity:**

This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. To ensure sufficient homogeneity of the sample prior to use thoroughly mix by inversion.

This Certified Reference Material was produced under ISO 9001 Quality Control System. The instructions of the ISO Guide 34<sup>[7]</sup> were considered for the preparation of this solution.

**Names and signatures of certifying officers:**

Laboratory:  Tihomir Stoyanov

Manager:  Krassimira Taralova

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[1] ISO Guide 31: Reference materials - Contents of certificates and labels

[2] ISO Guide 35: Reference materials - General and statistical principles for certification

[3] EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement

[4] EA 4/02: Expression of the Uncertainty of Measurement in Calibration

[5] ISO/IEC Guide 99: International Vocabulary of Metrology-Basic and general concepts and associated terms (VIM)

[6] ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories

[7] ISO Guide 34: General Requirements for the Competence of Reference Material Producers

*This certificate relates solely to the lot number given above.*

*All processes (including generating of this certificate) are completely controlled by the specialized Computer-Aided-Manufacturing (CAM) software.*

## Additional Information

Trace impurities in the actual solution reported in ppm:	
Br <sup>-</sup>	< 0.15
F <sup>-</sup>	< 0.10
I <sup>-</sup>	< 0.25
Cl <sup>-</sup>	< 0.08
PO <sub>4</sub> <sup>3-</sup>	< 0.20
SO <sub>4</sub> <sup>2-</sup>	< 0.15
NO <sub>3</sub> <sup>-</sup>	< 0.20

Operating Conditions Ion Chromatography:	
<b>Column:</b>	IonPack AS14 4 mm
<b>Anion Self regenerating Suppressor:</b>	ASRS II 4 mm
<b>Eluent Flow Rate:</b>	1.0 ml/min
<b>Eluent:</b>	3.5 mM Na <sub>2</sub> CO <sub>3</sub> / 1 mM NaHCO <sub>3</sub>
<b>Sample Concentration:</b>	20 mg/l
<b>Sample Volume:</b>	20 µl loop

