

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

Email USA: techserv@sial.com

Outside USA: eurtechserv@sial.com

## Certificate of Analysis

Product Name:

Silver nanospheres – 40 nm avg. part. size, 1 mg/mL (aqueous sodium citrate), citrate functionalized,  $\lambda_{max}$ , 415 nm

**Product Number:** 807001

**Batch Number:** MKBX2889

**Brand:** ALDRICH

**Formula Weight:** 18.02 g/mol

**Storage Temperature:** Store at 2-8 DEGREE C

**Quality Release Date:** 11 JAN 2016

**Date Retested:** 02 OCT 2018

**Recommended Retest Date:** OCT 2019

Test	Specification	Result
Appearance (Color)	Light Yellow to Yellow and Light Brown to Brown	Light Brown
Appearance (Form)	Liquid	Liquid
Wavelength		415 nm
Specification: Report Only		
ICP Major Analysis	Confirmed	Confirmed
Confirms Silver Component		
Diameter		40.7 nm
Specification: Report Only		
Surface Area (TEM)		13.7 m2/g
Specification: Report Only		
Concentration		1.00 mg/ml
Mass (Ag)		
Specification: Report Only		
Particles/ml	Confirmed	Confirmed
2.7E+ 12		
Diameter		46.8 nm
Hydrodynamic		
Specification: Report Only		
Zeta Potential		-42.6 mV
Specification: Report Only		
pH		7.4
Specification: Report Only		

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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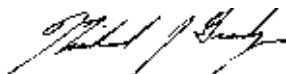
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## Certificate of Analysis

**Product Number:** 807001  
**Batch Number:** MKBX2889

Test	Specification	Result
Silver (Ag) 99.99%	Confirmed	Confirmed
Particle Surface Sodium Citrate	Confirmed	Confirmed
Recommended Retest Period 1 Year	-----	-----



Michael Grady, Manager  
Quality Control  
Milwaukee, WI US

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