
**Water quality — Plutonium and
neptunium — Test method using ICP-
MS**

*Qualité de l'eau — Plutonium et neptunium — Méthode d'essai par
ICP-MS*





COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

| | |
|--|-----------|
| Foreword..... | iv |
| Introduction..... | v |
| 1 Scope..... | 1 |
| 2 Normative references..... | 1 |
| 3 Terms, definitions, symbols and abbreviated terms..... | 2 |
| 4 Principle..... | 3 |
| 5 Reagents..... | 4 |
| 6 Apparatus..... | 5 |
| 7 Sampling..... | 5 |
| 8 Sample preparation..... | 5 |
| 8.1 General..... | 5 |
| 8.2 Storage..... | 5 |
| 8.3 Chemical separation..... | 5 |
| 9 Measurement procedure..... | 6 |
| 9.1 General..... | 6 |
| 9.2 Quantification with internal calibration and isotopic dilution..... | 6 |
| 10 Expression of results..... | 6 |
| 10.1 General..... | 6 |
| 10.2 Mass bias evaluation..... | 7 |
| 10.3 Internal calibration and isotopic dilution..... | 7 |
| 11 Uncertainties for isotopic dilution..... | 8 |
| 12 Instrumental detection limit..... | 8 |
| 13 Limit of quantification..... | 8 |
| 14 Activity concentration determination..... | 9 |
| 15 Test report..... | 9 |
| Annex A (informative) Chemical separation of plutonium and neptunium by specific resin..... | 10 |
| Bibliography..... | 12 |