
**Space systems — Surface cleanliness of
fluid systems —**

Part 3:

**Analytical procedures for the
determination of nonvolatile residues and
particulate contamination**

*Systèmes spatiaux — Propreté des surfaces en contact avec des
fluides —*

*Partie 3: Modes opératoires analytiques pour la détermination des
résidus non volatils et de la contamination particulaire*



Reference number
ISO 14952-3:2003(E)

© ISO 2003

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2003

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Acceptance inspection	2
4.1 General	2
4.2 Visual inspection	2
4.3 Acidity and alkalinity test	2
4.4 Acceptance inspection of items cleaned in a controlled environment	2
4.5 Acceptance inspection of items cleaned in the field	6
4.6 Acceptance inspection of packaging materials	7
4.7 Acceptance inspection of items by functional test	9
5 Sampling and analytical practices	9
5.1 Cleanliness level test methods	9
5.2 Microscopic particle population	12
5.3 Gravimetric NVR analysis method	12
5.4 Aqueous ultrasonic sampling and total carbon (TC) NVR analysis	13
Annex A (informative) Sensitivity factor calculation	15