

---

**Compressed air —**

**Part 4:**

**Test methods for solid particle content**

*Air comprimé —*

*Partie 4: Méthodes d'essai pour la détermination de la teneur en particules solides*



Reference number  
ISO 8573-4:2001(E)

© ISO 2001

**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 2001

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.ch](mailto:copyright@iso.ch)  
Web [www.iso.ch](http://www.iso.ch)

Printed in Switzerland

# Contents

Page

Foreword.....	iv
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	1
4 Units .....	2
5 Particle classes.....	2
5.1 Solid particles .....	2
5.2 Microbiological particles.....	2
5.3 Aerodynamic particle diameter .....	2
6 Selection of method .....	2
7 Sampling techniques.....	3
7.1 General.....	3
7.2 Full-flow sampling .....	3
7.3 Isokinetic sampling .....	4
7.4 Reducing system pressure before measurement .....	7
7.5 Average values.....	7
7.6 Operating conditions.....	7
8 Measurement methods.....	7
8.1 General.....	7
8.2 Laser particle counting .....	8
8.3 Condensation nucleus counting .....	8
8.4 Differential mobility analysis .....	8
8.5 Scanning mobility particle sizing.....	8
8.6 Sampling on membrane surface in conjunction with a microscope.....	8
9 Evaluation of test results .....	8
9.1 Reference conditions .....	8
9.2 Influence of humidity.....	9
9.3 Influence of pressure .....	9
9.4 Influence of temperature.....	9
9.5 Influence of other contaminants .....	9
10 Uncertainty .....	9
11 Test report .....	9
11.1 Statements.....	9
11.2 Statement format .....	10
Annex A (informative) Sample test report on determination of solid particle content in compressed air .....	11
Annex B (informative) Description of measurement methods .....	12
Bibliography.....	14