

First edition  
2014-12-15

---

---

**Soil quality — Determination of some  
selected phenols and chlorophenols  
— Gas chromatographic method with  
mass spectrometric detection**

*Qualité du sol — Dosage de quelques phénols et chlorophénols  
sélectionnés — Méthode par chromatographie en phase gazeuse avec  
détection par spectrométrie de masse*



Reference number  
ISO/TS 17182:2014(E)

© ISO 2014



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2014

All rights reserved. Unless otherwise specified, 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  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>3</b>
<b>3 Principle</b> .....	<b>3</b>
<b>4 Interferences</b> .....	<b>3</b>
4.1 Interference with sampling and extraction.....	3
4.2 Interference with GC-MS determination.....	4
<b>5 Reagents</b> .....	<b>4</b>
5.1 Products used in their commercially available form.....	4
5.2 Aqueous solutions.....	4
5.3 Standard solutions of phenols.....	5
<b>6 Apparatus and equipment</b> .....	<b>5</b>
<b>7 Sampling</b> .....	<b>6</b>
<b>8 Procedure</b> .....	<b>6</b>
8.1 Test portion.....	6
8.2 Dry matter content.....	6
8.3 Blank sample.....	6
8.4 Standard sample.....	6
8.5 Extraction.....	6
8.6 Acetylation.....	7
8.7 Gas chromatographic analysis.....	7
8.8 Calibration.....	7
<b>9 Calculation</b> .....	<b>8</b>
9.1 Calculation of the content of substance <i>i</i> in the extract.....	8
9.2 Calculation of the content of selected phenol soil sample per dry matter (mg/kg dry matter).....	9
<b>10 Test report</b> .....	<b>9</b>
<b>Annex A (informative) Typical concentrations of the standard solutions</b> .....	<b>10</b>
<b>Annex B (informative) Example of gas chromatographic conditions</b> .....	<b>11</b>
<b>Bibliography</b> .....	<b>15</b>