



Wastes, sediments and contaminated soils

Part 2: Preparation of leachates — Zero headspace procedure



AS 4439.2:2019

This Australian Standard® was prepared by CH-035, Examination Of Wastes. It was approved on behalf of the Council of Standards Australia on 20 August 2019.

This Standard was published on 4 October 2019.

The following are represented on Committee CH-035:

- Australasian Land and Groundwater Association
- Australian Contaminated Land Consultants Association
- Environmental Laboratory Industry Group
- Griffith University
- National Association of Testing Authorities Australia
- National Measurement Institute
- NSW Environment Protection Authority
- Soil Science Australia

This Standard was issued in draft form for comment as DR AS 4439.2:2019.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

www.standards.org.au

ISBN 978 1 76072 578 5



Wastes, sediments and contaminated soils

Part 2: Preparation of leachates — Zero headspace procedure

Originated as AS 4439.2—1997.
Second edition 2019.

COPYRIGHT

© Standards Australia Limited 2019

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

Preface

This Standard was prepared by the Standards Australia Committee CH-035, Examination of Wastes, to supersede AS 4439.2—1997.

The objective of this Standard is to provide a standardized method to determine the contamination potential of groundwater with volatile, organic materials from liquid and solid wastes, soils, sediments and sludges.

The major changes in this edition are as follows:

- (a) Option to use AS 4439.2 for potentially volatile Hydrogen Cyanide forming Cyanide species.
- (b) Additional information on use of this method for Per- and Polyfluoroalkyl Substances (PFAS).
- (c) Additional options for determination of percentage solids.
- (d) Modified reporting requirements.

The terms “normative” and “informative” are used in Standards to define the application of the appendix to which they apply. A “normative” appendix is an integral part of a Standard, whereas an “informative” appendix is only for information and guidance.

Contents

Preface	ii
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	3
5 Reagents	3
5.1 General requirement	3
5.2 Reagent water	3
5.3 Leaching fluid	3
5.3.1 General	3
5.3.2 Leaching fluid pH 5.0	3
5.3.3 Leaching fluid pH 9.2	3
5.3.4 Compressed gas	3
6 Apparatus	4
6.1 General	4
6.2 Agitation apparatus	4
6.3 Filters	4
6.4 Glassware	4
6.5 Laboratory balance	4
6.6 Leaching fluid reservoir	4
6.7 Leaching vessel	5
6.8 Liquid collection devices	6
6.9 Mortar and pestle	7
6.10 Plastic push rod	7
6.11 pH meter	7
6.12 Pressure filtration device	7
7 Preparation of test samples	8
7.1 Collection and storage	8
7.2 Reduction of sample particle size	9
7.3 Determination of percentage solids	9
8 Procedure	10
8.1 Introduction	10
8.2 Selection of leaching fluid	12
8.3 Number of determinations	12
8.4 Blank test	12
8.5 Preparation of the zero headspace extractor for use	12
8.6 Leaching of samples	13
9 Analysis and calculation	15
10 Test report	16
Appendix A (informative) Purgable volatile organic compounds	18
Bibliography	19

This is a free 6 page sample. Access the full version online.

NOTES

This is a free preview. Purchase the entire publication at the link below:

AS 4439.2 : 2019 : EN : COMBINED PDF

-
- ⊙ Looking for additional Standards? Visit SAI Global Infostore
 - ⊙ Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-

Need to speak with a Customer Service Representative - Contact Us