

## Australian Standard®

AS 4969.7—2008

**Analysis of acid sulfate soil—Dried samples—  
Methods of test****Method 7: Determination of chromium reducible  
sulfur ( $S_{CR}$ )**

## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee EV-009, Sampling and Analysis of Soil and Biota, Working Group EV-009-02-01, Analysis of Acid Sulfate Soil.

The objective of this Standard is to provide a method for the determination of chromium reducible sulfur ( $S_{CR}$ ) in acid sulfate soil.

## METHOD

**1 SCOPE**

This Standard specifies a method for the determination of chromium reducible sulfur ( $S_{CR}$ ) by iodometric titration of distilled hydrogen sulfide trapped as zinc sulfide.

NOTE: This method determines inorganic sulfides (e.g. pyrite, marcasite, greigite, mackinawite) and elemental sulfur in acid sulfate soil without interferences from organic sulfur and oxidized forms of sulfur such as sulfate.

**2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

AS	
2162	Verification and use of volumetric apparatus
2162.1	Part 1: General—Volumetric glassware
2162.2	Part 2: Guide to the use of piston-operated volumetric apparatus (POVA)
2164	Laboratory glassware—One-mark volumetric flasks
2165	Laboratory glassware—Burettes
2166	Laboratory glassware—One-mark pipettes
2167	Graduated straight pipettes
4969	Analysis of acid sulfate soil—Dried samples—Methods of test
4969.0	Part 0: Introduction and definitions, symbols and acronyms
4969.1	Method 1: Pre-treatment of samples