

AS 2669—1983

Australian Standard<sup>®</sup>

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**SULPHURIC ACID FOR USE IN  
LEAD-ACID BATTERIES**

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This Australian standard was prepared by Committee EL/5 Accumulators. It was approved on behalf of the Council of the Standards Association of Australia on 29 September 1983 and published on 4 November 1983.

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The following interests are represented on Committee EL/5:

Australian Automobile Association  
Australian Federation of Consumer Organizations Inc.  
Australian Lead Development Association  
Confederation of Australian Industry  
Department of Defence  
Department of Health, N.S.W.  
Department of Science and Technology  
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## **SULPHURIC ACID FOR USE IN LEAD-ACID BATTERIES**

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## PREFACE

This standard was prepared by the Association's Committee on Accumulators. It supersedes AS C60-1961, Sulphuric Acid for Use in Secondary Batteries.

During the preparation of this standard, close consideration was given to the adoption of ISO standards (in particular methods of analysis) wherever possible. The emphasis, however, was to adopt the simplest method suitable for the task in hand. Again, where possible, methods of analysis using the atomic absorption spectrometric techniques have been adopted.

Major differences between the ISO standards and this standard are as follows:

1. The allowable limits for impurities in acid remain unaltered, however platinum has been deleted from the list.
2. All methods of analysis have been altered to improve and modernize the techniques used, bearing in mind the comments made above relating to the standards.

It should be noted that reference is made to acid for use in batteries and not the electrolytes already used in batteries. This is of particular importance when chloride determinations are required on used electrolytes. In these instances reduction of oxidized species of chlorine are required prior to total chloride determination.

In the preparation of this standard, reference was made to the ISO standards listed below and acknowledgement is made of the assistance received therefrom.

ISO 910	Sulphuric Acid and Oleum for Industrial Use – Determination of Total Acidity and Calculation of Free Sulphur Dioxide Content of Oleum – Titrimetric Method
ISO 911	Sulphuric Acid for Industrial Use – Evaluation of Sulphuric Acid Concentration by Measurement of Density
ISO 914	Sulphuric Acid and Oleum for Industrial Use – Determination of Total Nitrogen Content – Titrimetric Method after Distillation
ISO 915	Sulphuric Acid and Oleum for Industrial Use – Determination of Iron Content – 2,2' Bipyridyl Spectrophotometric Method
ISO 2363	Sulphuric Acid and Oleum for Industrial Use – Determination of Oxides of Nitrogen – 2,4-Xylenol Spectrophotometric Method
ISO 2590	General Method for the Determination of Arsenic – Silver Diethyldithiocarbamate Photometric Method
ISO 2877	Sulphuric Acid for Industrial Use – Determination of Chlorides Content – Potentiometric Method
ISO 2899	Sulphuric Acid and Oleum for Industrial Use – Determination of Ammoniacal Nitrogen Content – Spectrophotometric Method
ISO 5792	Sulphuric Acid for Industrial Use – Determination of Arsenic Content – Silver Diethyldithiocarbamate Photometric Method

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