AS 2669—1983

## Australian Standard®

# SULPHURIC ACID FOR USE IN LEAD-ACID BATTERIES

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.

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

Department of Housing and Construction

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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:

- The allowable limits for impurities in acid remain unaltered, however platinum has been deleted from the list.
- 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	10 Sulphuric Acid and Oleum for Industrial Use – Determination of Total Acid			
	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 5792 Sulphuric Acid for Industrial Use – Determination of Arsenic Content – Silver Diethyldithiocarbamate Photometric Method

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