

AS 4036—1992

Australian Standard[®]

**Corrosion of metals—Dissimilar
metals in contact in seawater**

This Australian Standard was prepared by Committee MT/14, Corrosion of Metals. It was approved on behalf of the Council of Standards Australia on 8 May 1992 and published on 20 July 1992.

The following interests are represented on Committee MT/14:

Aluminium Development Council
Australasian Corrosion Association
Australian Gas Association
Australian Institute of Steel Construction
Australian Zinc Development Association
Austroads
Bureau of Steel Manufacturers of Australia
Confederation of Australian Industry
Department of Defence
Electricity Supply Association of Australia
Engineering and Water Supply Department, S.A.
Railways of Australian Committee
Standards Association of New Zealand
States Electrolysis Committees
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Additional interests participating in preparation of Standard:

Department of Manufacturing and Industry Development
Melbourne Water Corporation
Queensland Electricity Commission
University of Queensland

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PREFACE

This Standard was prepared under the direction of the Multitechnics Standards Policy Board by the Standards Australia Committee on Corrosion of Metals, at the request of the Department of Defence, to replace the Australian Defence Standard, DEF(AUST) 143 *Corrosion and its prevention at bimetallic contacts*.

In the future it is intended to expand the scope of this Standard to cover corrosion of dissimilar metals in contact when subjected to corrosive environments other than marine environments.

This Standard provides an original test method to derive ratings of galvanic corrosion activity of metallic couples immersed in artificial seawater, based on their current/time relationships.

It also lists for reference, the galvanic series comprising a number of individual metals and alloys after immersion for one hour and also for a 28 day period, in artificial seawater.

In preparing this Standard, cognizance was taken of DEF(AUST) 143 and the following documents:

PD 6484 *Commentary on corrosion at bimetallic contacts and its alleviation*

ASTM D 1141 *Substitute ocean water*

Department of Defence Navy Corrosion Source documents

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