

Australian/New Zealand Standard™

**Paints for steel structures**

**Part 9: Organic zinc-rich primer**



## **AS/NZS 3750.9:2009**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CH-003, Paints and Related Materials. It was approved on behalf of the Council of Standards Australia on 16 March 2009 and on behalf of the Council of Standards New Zealand on 27 March 2009.  
This Standard was published on 20 April 2009.

---

The following are represented on Committee CH-003:

### **AUSTROADS**

Australasian Corrosion Association  
Australian Paint Approval Scheme  
Australian Paint Manufacturers' Federation  
Australian Pipeline Industry Association  
Business New Zealand  
Engineers Australia  
Institution of Professional Engineers New Zealand  
Master Painters Australia  
Master Painters New Zealand Association  
National Association of Testing Authorities Australia  
Water Corporation Western Australia

---

### **Keeping Standards up-to-date**

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at [www.standards.com.au](http://www.standards.com.au) or Standards New Zealand website at [www.standards.co.nz](http://www.standards.co.nz) and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

---

*This Standard was issued in draft form for comment as DR 06352.*

---

Australian/New Zealand Standard™

**Paints for steel structures**

**Part 9: Organic zinc-rich primer**

Originally published in Australia as AS 2204—1978.  
Previous edition AS/NZS 3750.9:1994.  
Second edition 2009.

**COPYRIGHT**

© Standards Australia/Standards New Zealand

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.

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 9123 9

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CH-003, Paints and Related Materials, to supersede AS/NZS 3750.9:1994.

The objective of this Standard is to provide requirements for organic zinc-rich priming paint intended for use on iron and steel structures. It forms part of a series of product standards for paints referred to in AS/NZS 2312, *Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings*. This edition has been reformatted and takes account of revisions to Standards such as AS/NZS 2312 and the AS 1580 series of test methods.

The following Standards in this series have been published:

## AS

- 2364 Paints for steel structures—High build epoxy (two-pack)
- 2672 Paints for steel structures—Chlorinated rubber, high build
- 2673 Paints for steel structures—Alkyd/micaceous iron oxide
- 2674 Paints for steel structures—Epoxy primer (two-pack)
- 3750 Paints for steel structures
- 3750.1 Part 1: Epoxy mastic (two-pack)—For rusted steel
- 3750.2 Part 2: Ultra high-build paint
- 3884 Etch primers (single pack and two-pack) for pretreating metal surfaces
- 3885 Paints for steel structures—Galvanized and zinc primed—Latex
- 3887 Paints for steel structures—Coal tar epoxy (two-pack)

## AS/NZS

- Paints for steel structures
- 3750.3 Part 3: Heat-resisting—Epoxy
- 3750.4 Part 4: Bitumen paint
- 3750.5 Part 5: Acrylic full gloss (two-pack)
- 3750.6 Part 6: Full gloss polyurethane (two-pack)
- 3750.7 Part 7: Aluminium paint
- 3750.8 Part 8: Vinyl paints—Primer, high-build and gloss
- 3750.9 Part 9: Organic zinc-rich primer (this Standard)
- 3750.10 Part 10: Full gloss epoxy (two-pack)
- 3750.11 Part 11: Chlorinated rubber—High-build and glass
- 3750.12 Part 12: Alkyd/micaceous iron oxide
- 3750.13 Part 13: Epoxy primer (two-pack)
- 3750.14 Part 14: High-build epoxy (two-pack)
- 3750.15 Part 15: Inorganic zinc silicate paint
- 3750.16 Part 16: Waterborne primer and paint for galvanized, zinc/aluminium alloy-coated and zinc-primed steel
- 3750.17 Part 17: Etch primers (single pack and two-pack)
- 3750.18 Part 18: Moisture cure urethane (single-pack) systems
- 3750.19 Part 19: Metal primer—General purpose
- 3750.20 Part 20: Anticorrosive metal primer—Solvent-borne—Lead and chromate free
- 3750.21 Part 21: Undercoat—Solvent-borne
- 3750.22 Part 22: Full gloss enamel—Solvent-borne
- 3750.23 Part 23: Semi-gloss enamel—Solvent-borne

The terms ‘normative’ and ‘informative’ have been used in this Standard 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

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE .....	4
1.2 REFERENCED DOCUMENTS .....	4
1.3 DEFINITIONS .....	4
1.4 CLASSIFICATION .....	4
1.5 COLOUR.....	4
1.6 SAFETY PRECAUTIONS .....	4
SECTION 2 MATERIAL REQUIREMENTS	
2.1 GENERAL .....	6
2.2 PIGMENT .....	6
2.3 CONDITIONS OF TEST.....	6
2.4 LIQUID PAINT.....	6
2.5 APPLICATION PROPERTIES .....	7
2.6 APPLIED FILM .....	7
SECTION 3 PACKAGING AND LABELLING	
3.1 PACKAGING.....	10
3.2 LABELLING.....	10
APPENDICES	
A PURCHASING GUIDELINES.....	11
B INFORMATION ON THE USE AND APPLICATION OF ORGANIC ZINC-RICH PRIMER .....	12
C REFERENCED DOCUMENTS .....	15
D PREPARATION OF TEST PANELS .....	16

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard  
Paints for steel structures****Part 9: Organic zinc-rich primer**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard specifies requirements for an organic zinc-rich primer intended to protect iron and steel against atmospheric corrosion. It is suitable for application by brush, or spray.

## NOTES:

- 1 Type 2 paint specified in the Standard is referred to in AS/NZS 2312 as Paint Reference No. C02.
- 2 Type II paints may be used as detailed for systems ACC2, ACC2-6, EHB4, EHB6, PSL1, PUR4, PUR5 and PUR7 in AS/NZS 2312.
- 3 Appendix A contains recommendations and advice on information that should be provided by the purchaser at the time of enquiry or order.
- 4 Additional information on the use and application of organic zinc-rich primer is provided in Appendix B.

**1.2 REFERENCED DOCUMENTS**

A list of the documents referred to in this Standard is contained in Appendix C.

**1.3 DEFINITIONS**

For the purpose of this Standard, the definitions given in AS/NZS 2310 and those below apply.

**1.3.1 Organic zinc-rich primer**

A material consisting essentially of a dispersion of metallic zinc dust in an organic medium.

**1.4 CLASSIFICATION**

Organic zinc-rich primers shall be classified as follows:

- (a) Type 1—a single-pack primer.
- (b) Type 2—a multi-pack primer that hardens by reaction of its constituents after mixing.

**1.5 COLOUR**

The colour of the product is usually characteristic of the zinc dust pigment, but to overcome the difficulty of differentiating between a coat of paint and a freshly prepared surface, the product may contain suitable tinting pigments.

NOTE: The product may have differing shades according to the application conditions.