

Australian Standard™

**Paints and related materials—Pavement  
marking materials**

**Part 3: Waterborne paint—For use with  
surface applied glass beads**

**STANDARDS**  
Australia



This Australian Standard was prepared by Committee CH-003, Paints and Related Materials. It was approved on behalf of the Council of Standards Australia on 1 August 2005. This Standard was published on 26 October 2005.

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The following are represented on Committee CH-003:

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Australian Motorcycle Council  
Australian Paint Approval Scheme  
Australian Paint Manufacturers' Federation  
Main Roads Department, Queensland  
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## PREFACE

This Standard was prepared by the Australian members of the Joint Australia/New Zealand Standards Committee CH-003, Paints and Related Materials to supersede AS/NZS 4049.3:1996, *Paints and related materials—Road marking materials Part 3: Waterborne paint—For use with drop-on beads*.

*This Standard incorporates Amendment No. 1 (February 2006). The changes arising from the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

This Standard is Part 3 of the series dealing with pavement marking materials. Other Standards in the AS 4049 series are:

AS

4049 Paints and related materials—Pavement marking materials

4049.1 Part 1: Solvent-borne paint—For use with surface applied glass beads

4049.2 Part 2: Thermoplastic pavement marking materials—For use with surface applied glass beads

The objective of this Standard is to provide requirements and recommendations, which may be used when specifying waterborne pavement marking paint.

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.

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## FOREWORD

Pavement marking paints are expected to perform under a wide variety of application, curing and exposure conditions, and therefore need to be assessed in both the laboratory and in the field. This Standard provides test procedures and performance criteria aimed at identifying paints that will provide satisfactory performance as a beaded pavement marking in the majority of applications.

Skid resistance requirements were considered for inclusion but have not been specified in this Standard. The skid resistance of a pavement marking paint is not a fixed property for any given formulation. For a new marking it may vary considerably according to the road surface and texture and it will also vary throughout its life according to conditions such as traffic wear and weather. Whilst the drop-on addition of glass beads may increase the frictional characteristics, the resultant skid resistance levels may not satisfy the requirements of all road users.

It is recommended that users of this Standard consult material suppliers where skid resistance is a requirement for the applied marking.

## STANDARDS AUSTRALIA

### Australian Standard

## Paints and related materials—Pavement marking materials

### Part 3: Waterborne paint—For use with surface applied glass beads

#### 1 SCOPE

This Standard sets out requirements for waterborne paints as used for pavement markings on pavement surfaces. Paints are designed for use with Type B and D glass beads complying with AS/NZS 2009.

##### NOTES:

- 1 Alternative means for determining compliance with this Standard are given in Appendix M.
- 2 Additional information on the use and application of waterborne pavement marking paint is contained in Appendix B.

#### 2 OBJECTIVE

The objective of this Standard is to provide requirements and recommendations, which may be used when specifying waterborne pavement marking paints.

#### 3 REFERENCED DOCUMENTS

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

#### 4 DEFINITIONS

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

##### 4.1 Test pavement

Dense grade asphalt and/or sprayed bituminous surfacing constructed using an aggregate with a nominal size of 10 mm in accordance with Table 1 of AS 2758.2. The pavement shall be free from the impact of turning vehicles, at least 6 months old and free from cracking, rutting or any other defects which may impact on the testing outcome.

##### 4.2 Retroreflectivity

The property of some materials such as solid glass beads, to reflect incident light in directions close to the direction from which it came.

#### 5 COMPOSITION

Paints shall consist essentially of pigments, extenders, solvents and resinous binders. The material shall not be a first schedule or second schedule paint as defined in the Uniform Paint Standard, prepared by the National Health and Medical Research Council (NHMRC), and shall meet the requirements of State and Territory regulatory authorities.