

TRANSPORT FOR NSW (TfNSW)

QA SPECIFICATION 3359

PROFILE THERMOPLASTIC ROAD MARKING MATERIAL

NOTICE

This document is a Transport for NSW QA Specification. It has been developed for use with roadworks and bridgeworks contracts let by Transport for NSW or by local councils in NSW. It is not suitable for any other purpose and must not be used for any other purpose or in any other context.

Copyright in this document belongs to Transport for NSW.

REVISION REGISTER

Ed/Rev Number	Clause Number	Description of Revision	Authorised By	Date
Ed 1		First Issued	GM, CEC	21 Apr 95
Ed 2	2, 3	Converted to MS Word 6.0c. Document reformatted. References updated. AS 3902 deleted.	GM, RNIC (J Woodward)	22.04.97
Ed 3/Rev 0	“Notice” Spec Ref No Foreword Global 5 6	RTA PO Box and Fax numbers updated Revision No added Foreword added. Text revised to direct imperative style. “shall” replaced by “must”. Reformatting and minor editing. Clauses rearranged and renumbered. References to AS 4049.2 Appendices changed. Skid resistance changed to 45 Requirement inserted for testing to be by NATA laboratory or laboratory approved by Principal.	GM, IC	20.04.09
Ed 3/Rev 1	Global	References to “Roads and Maritime Services” or “RMS” changed to “Transport for NSW” or “TfNSW” respectively.	DCS	22.06.20



Transport
for NSW

QA SPECIFICATION 3359

PROFILE THERMOPLASTIC ROAD MARKING MATERIAL

Copyright – Transport for NSW
IC-QA-3359

VERSION FOR: DATE:

CONTENTS

CLAUSE	PAGE
FOREWORD	ii
TfNSW Copyright and Use of this Document	ii
Revisions to Previous Version	ii
Project Specific Changes	ii
1 SCOPE.....	1
2 STRUCTURE OF THE SPECIFICATION.....	1
2.1 (Not Used)	1
2.2 (Not Used)	1
2.3 (Not Used)	1
2.4 Referenced Documents and Definitions	1
3 (NOT USED).....	1
4 SUPPLIER'S QUALITY MANAGEMENT SYSTEM	1
5 MATERIAL REQUIREMENTS	2
6 PRODUCT CERTIFICATION	2
7 PRODUCT IDENTIFICATION.....	2
ANNEXURES 3359/A TO 3359/L – (NOT USED).....	3
ANNEXURE 3359/M – REFERENCED DOCUMENTS	3
LAST PAGE OF THIS DOCUMENT IS	3

FOREWORD

TfNSW COPYRIGHT AND USE OF THIS DOCUMENT

Copyright in this document belongs to Transport for NSW.

When this document forms part of a contract

This document should be read with all the documents forming the Contract.

When this document does not form part of a contract

This copy is not a controlled document. Observe the Notice that appears on the first page of the copy controlled by TfNSW. A full copy of the latest version of the document is available on the TfNSW Internet website: <http://www.rms.nsw.gov.au/business-industry/partners-suppliers/specifications/index.html>

REVISIONS TO PREVIOUS VERSION

This document has been revised from Specification TfNSW 3359 Edition 3 Revision 0.

All revisions to the previous version (other than minor editorial and project specific changes) are indicated by a vertical line in the margin as shown here, except when it is a new edition and the text has been extensively rewritten.

PROJECT SPECIFIC CHANGES

Any project specific changes are indicated in the following manner:

- (a) Text which is additional to the base document and which is included in the Specification is shown in bold italics e.g. ***Additional Text***.
- (b) Text which has been deleted from the base document and which is not included in the Specification is shown struck out e.g. ~~Deleted Text~~.

TfNSW QA SPECIFICATION 3359

PROFILE THERMOPLASTIC ROAD MARKING MATERIAL

1 SCOPE

This Specification sets out the material requirements for thermoplastic road marking compound suitable for application to the road surface to produce a profile marking which gives an audible/tactile response to vehicle tyre contact.

2 STRUCTURE OF THE SPECIFICATION

This Specification includes a series of annexures that detail additional requirements.

2.1 (NOT USED)

2.2 (NOT USED)

2.3 (NOT USED)

2.4 REFERENCED DOCUMENTS AND DEFINITIONS

Unless specified otherwise, the applicable issue of a referenced document, other than a TfNSW Specification, must be the issue current at the date one week before the closing date for tenders, or where no issue is current at that date, the most recent issue.

Standards, specifications and test methods are referred to in abbreviated form (e.g. AS 2350). For convenience, the full titles are given in Annexure 3359/M.

The term “the Supplier” means the supplier of the product covered by the scope of this Specification.

3 (NOT USED)

4 SUPPLIER’S QUALITY MANAGEMENT SYSTEM

The Supplier must establish and maintain a Quality Management System complying with AS/NZS ISO 9001 as a means of ensuring that the product conforms to this Specification.

Provide evidence verifying compliance with this Clause.

5 MATERIAL REQUIREMENTS

The thermoplastic material must comply with the requirements of AS 4049.2 except as modified below:

(a) **Softening Point**

When determined in accordance with AS 2341.18, the softening point must be not less than 95°C.

(b) **Cold Flow**

When determined in accordance with AS 4049.2 Appendix I, the cold flow must be no more than 5% at 40°C.

(c) **Skid Resistance**

When tested in accordance with AS 4049.2 Appendices K and L at any time up to 3,000,000 vehicle passes, the skid resistance value of beaded unprofiled base material must be not less than 45.

(d) **Retroreflectivity**

When tested in accordance with AS 4049.2 Appendices K and M, at any time up to 3,000,000 vehicle passes, the retroreflectivity of a beaded line of the unprofiled base material must be greater than 100 mcd/lux/m².

6 PRODUCT CERTIFICATION

The Supplier must provide, prior to delivery, a certificate of compliance verifying that the product complies with Clause 5 of this Specification, together with the results of the relevant tests. The tests must be carried out by a laboratory accredited by NATA to carry out such tests, or by a laboratory approved by the Principal.

Certification must relate only to the formulation on which the tests were made and must be valid for not more than three years. New certification will be required whenever changes in product formulation are made.

7 PRODUCT IDENTIFICATION

Mark each container clearly with the following information:

- (a) Name of the supplier;
- (b) Product name and/or number;
- (c) Net contents in kilograms;
- (d) Batch number or date of manufacture;
- (e) Application temperature and maximum safe heating temperature;
- (f) Instructions and warnings for use;
- (g) Statutory requirements.

ANNEXURES 3359/A TO 3359/L – (NOT USED)

ANNEXURE 3359/M – REFERENCED DOCUMENTS

Refer to Clause 2.4.

Australian Standards

AS 2341	Methods of testing bitumen and related roadmarking products
AS 4049.2	Paints and related materials – Pavement marking materials – Thermoplastic pavement marking materials – For use with surface applied glass beads
AS/NZS ISO 9001	Quality Management Systems – Requirements