

TRANSPORT FOR NSW (TfNSW)

SPECIFICATION D&C 3353

GLASS BEADS (FOR APPLICATION TO ROAD MARKING MATERIALS)

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CONTENTS

CLAUSE	PAGE
FOREWORD	ii
TfNSW Copyright and Use of this Document.....	ii
Base Specification	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 PACKAGING	2
ANNEXURES 3353/A TO 3353/L – (NOT USED)	3
ANNEXURE 3353/M – REFERENCED DOCUMENTS.....	3
LAST PAGE OF THIS DOCUMENT IS	3

FOREWORD

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BASE SPECIFICATION

This document is based on Specification TfNSW 3353 Edition 7 Revision 2.

TNSW SPECIFICATION D&C 3353
GLASS BEADS
(FOR APPLICATION TO ROAD MARKING MATERIALS)

1 SCOPE

This Specification sets out the requirements for glass beads for incorporation into and on to road marking materials for the production of a reflective surface to improve the visibility of the marking at night.

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

Standards, specifications and test methods are referred to in abbreviated form (e.g. AS 1234). For convenience, the full titles are given in Annexure 3353/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.

The Quality Management System must include product certification in accordance with Clause 6 below, and sampling to verify product conformity during production.

5 MATERIAL REQUIREMENTS

The glass beads must comply with all the requirements specified in AS/NZS 2009 and Australian Paint Approval Scheme (APAS) Specification 0042. In addition, the amount of heavy metals in the beads must not be greater than that specified in APAS Specification 0042 (refer to Section 3, Table 1, and Appendix A).

6 PRODUCT CERTIFICATION

Provide a certificate of compliance verifying that the glass beads comply with Clause 5 of this Specification, together with the relevant test results on NATA endorsed test documents. The certificate must relate only to the formulation on which the tests were made and must be attached to each commercial batch of product supplied. The batch numbering system employed must be unique to each batch and provide full traceability.

7 PACKAGING

When required to be stored, package the beads as follows:

- (a) Multiwall bags of 15 kg capacity comprising:
 - (i) hermetically sealed high density polyethylene liner (38 μm)
 - (ii) intermediate layers of natural sack kraft paper (2 x 73 g/m^2)
 - (iii) outer layer of laminated kraft paper and high density polyethylene (173C) comprising 85 g/m^2 bleached sack kraft, coated on the outer surface with a non-slip coating 15 μm high density polyethylene film 73 g/m^2 natural sack kraft 2 ply x 73 g/m^2 natural sack kraft 50 μm high density polyethylene film.

(Note: Alternative materials may be used if it can be demonstrated that durability, strength, waterproofing, and handling properties of the bags produced are equal to or better than those of the multiwall bags described above.)

OR

- (b) Returnable bulk containers of minimum capacity 1000 kg tare weight (maximum 1500 kg tare weight).

ANNEXURES 3353/A TO 3353/L – (NOT USED)

ANNEXURE 3353/M – REFERENCED DOCUMENTS

Refer to Clause 2.4.

Australian Standards

AS/NZS 2009 Glass beads for road marking materials
AS/NZS ISO 9001 Quality management systems – Requirements

Australian Paint Approval Scheme (APAS) Specifications

Spec 0042 Glass Beads for Pavement Marking Paint