

Australian Standard™

Complete, filled transport packages— Methods of test

Method 8: Internal hydraulic pressure test

PREFACE

This Standard was prepared by Standards Australia Committee PK-012, Physical Testing of Packages and Containers, to provide a method for assessing the ability of packages to withstand the rigours of handling and transport. This Standard is a revision of AS 2582.8—1985, *Complete, filled transport packages—Methods of test, Part 8: Internal hydraulic pressure test*.

Further performance parameters, e.g. time and pressure, are specified in other test methods and Standards which make reference to this Standard.

METHOD

1 SCOPE

This Standard sets out a method of testing packagings and complete, filled transport packages for their ability to withstand internal pressure.

2 APPLICATION

This test is intended to be used for type testing or for quality control purposes, performed either as—

- (a) a single test, to investigate the effects of this pressure (e.g. deformation, creep, collapse or failure); or
- (b) part of a series of tests, designed to measure the ability of the package to withstand an increase in internal pressure.

3 REFERENCED DOCUMENTS

The following Australian Standards are referenced in this Standard:

AS	
1349	Bourdon tube pressure and vacuum gauges
2400	Packaging
2400.1	Part 1: Glossary of packaging terms
2582	Complete, filled transport packages—Methods of test
2582.2	Part 2: Conditioning for testing

4 DEFINITIONS

For the purpose of this Standard, the definitions given in AS 2400.1 and those below apply.

4.1 Package

The complete product of the packing operation, consisting of the packaging and its contents prepared for transport.

4.2 Packaging

Any receptacle or component used to contain or protect the package's contents.

5 PRINCIPLE

The test specimen is placed in its intended transport attitude on a flat surface and is subjected to a predetermined constant hydraulic pressure for a redetermined length of time.

6 APPARATUS

A system, capable of maintaining the predetermined conditions, consisting of the following:

- (a) A connection through a closure or the body of the test specimen, in such a way that the connection is unlikely to affect the test result.
- (b) An industrial pressure gauge conforming to the requirements of AS 1349.

7 CONDITIONING

Where required, the test specimen shall be filled with the test liquid and shall be conditioned using appropriate condition or conditions as given in AS 2582.2.

8 PROCEDURE

8.1 General

The test shall be carried out in the same atmospheric conditions as those used for conditioning where required.

8.2 Method

The test specimen shall be filled with the test liquid, closed, conditioned and subjected to the predetermined hydraulic pressure for the predetermined period of time.

WARNING: THE TEST SPECIMEN SHOULD NOT BE MECHANICALLY CONSTRAINED OR STRENGTHENED DURING THE TEST. IT MAY BE SUPPORTED TO AVOID TOPPLING IF THE BOTTOM BULGES.

9 TEST REPORT

The test report shall include the following information:

- (a) Full description of the test specimen, including dimensions, and structural and material specifications.
- (b) Number of replicate test specimens tested.
- (c) Closing conditions, including torque, if applicable.
- (d) Conditioning and test conditions, including pressure and test period.
- (e) Test liquid used.
- (f) Any deviations from the test method described in this Standard.
- (g) The result and any observations which may assist in interpretation.
- (h) Date.
- (i) Signature of tester.