

English Version

Packaging - Flexible aluminium tubes - Test method to check the resistance of the internal protective coating against ammonia

Emballage - Tubes souples en aluminium - Méthode de détermination de la résistance du vernis intérieur à l'ammoniac

Packmittel - Aluminiumtuben - Prüfverfahren zur Ermittlung der Beständigkeit des Innenschutzlackes gegen Ammoniak

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Foreword

This document (EN 15653:2009) has been prepared by Technical Committee CEN/TC 261 “Packaging”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2009, and conflicting national standards shall be withdrawn at the latest by September 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

It is based on the professional recommendations of the European Tube Manufacturers Association (ETMA)

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1 Scope

The ammonia test is a quick test to check the chemical resistance of the internal protective coating of aluminium tubes. The test is used for flexible aluminium tubes for ammonia containing fillings and as an introductory test for newly developed internal protective coatings.

2 Test device / media

- Aqueous solution of ammonia with a mass fraction of (20-25)% inclusive;
- Ventilated hood;
- Test tubes and special holder;
- Rack;
- Scissors;
- Protective glasses.

3 Test operation

Stand the samples on the tube cap, fill them with the test solution under the ventilated hood and put open into a rack. Immediately cover the open ends of the tubes. After a storage period of 2 h at room temperature empty the test solution from the test samples into the test tubes. Rinse the samples with water and carefully cut open with the scissors.

4 Evaluation of the internal coating

The internal protective coating shall not show any large blisters or softening (scratch test). Occasional blisters (up to a diameter of 5 mm) and detachment of the internal protective coating at the cut edges are of no concern and can therefore be accepted.

5 Test report

The test report shall contain the following information:

- a) reference to this standard;
- b) complete identification of the batch and of the tubes checked;
- c) description and dimensions of the samples;
- d) nature of the internal protective coating;
- e) concentration of the ammonia solution;
- f) test results, including the number of defects;
- g) number of samples checked;
- h) if necessary, acceptance or refusal of the batch depending on the specifications;
- i) all factors which can have affected the results and which are not specified in this standard;
- j) date, place of test and name of tester.