

**Packaging — Flexible  
aluminium tubes  
— Test methods  
to determine the  
polymerization of the  
internal coating with  
acetone**

ICS 55.120

## National foreword

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The UK participation in its preparation was entrusted to Technical Committee PKW/0/-/10, Plastics.

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English Version

## Packaging - Flexible aluminium tubes - Test methods to determine the polymerization of the internal coating with acetone

Emballage - Tubes souples en aluminium - Méthodes d'essai visant à vérifier la polymérisation du revêtement interne à l'acétone

Packmittel - Aluminiumtuben - Prüfverfahren zur Bestimmung der Polymerisation der Innenbeschichtung mit Aceton

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## **Foreword**

This document (EN 15766:2009) has been prepared by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR.

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## 1 Scope

This standard specifies a method for the determination of the polymerization of the internal coating of aluminium tubes with acetone.

## 2 Principle

Epoxy phenolic internal coatings are mostly used as internal coating for aluminium tubes. Acetone is a good solvent for epoxy-phenolic coatings before polymerization. Polymerized epoxy-phenolic coatings are not soluble. Therefore, when the surface of the coating is rubbed with a piece of cotton wool soaked in acetone, if the coating has not been sufficiently hardened, there will be partial dissolution and a discharge on the cotton wool (colouring).

For non-epoxy phenolic coatings, the test method shall be mutually agreed upon by customer and supplier.

## 3 Test device/Test media

- Acetone CAS No. 67-64-1.
- Cotton wool.

## 4 Procedure

Cut the tube and flatten the cylindrical part.

Rub  $10 \pm 1$  times up and down with a piece of cotton wool soaked in acetone with a pressure of approximately  $10 \text{ N/cm}^2$ .

Check the colour of the cotton wool.

## 5 Evaluation of results

After rubbing, the coated surface shall not have become matt or sticky.

There should be no colouring of the cotton wool, nor any apparent reaction on the coated surface.

A slight coloration of the cotton wool can be accepted if no apparent reactions on the coated surface are detected.

## **6 Test report**

The test report shall contain the following information:

- a) reference to this standard and, if necessary, a specification for the method of sampling and acceptance of the batch;
- b) complete identification of the batch and of the tubes checked;
- c) date of production;
- d) number of tubes checked;
- e) number of defects;
- f) test result;
- g) all factors which could have affected the results or all operating details not specified in this standard;
- h) date, place of test and name of tester.

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