

I.S. EN 927-6:2006

ICS 87.040

PAINTS AND VARNISHES - COATING

MATERIALS AND COATING SYSTEMS FOR

EXTERIOR WOOD - PART 6: EXPOSURE OF

WOOD COATINGS TO ARTIFICIAL

WEATHERING USING FLUORESCENT UV

LAMPS AND WATER

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM EN 927-6

August 2006

ICS 87.040

#### **English Version**

# Paints and varnishes - Coating materials and coating systems for exterior wood - Part 6: Exposure of wood coatings to artificial weathering using fluorescent UV lamps and water

Peintures et vernis - Produits de peinture et systèmes de peinture pour bois en extérieur - Partie 6 : Vieillissement artificiel des revêtements pour bois par exposition à des lampes UV fluorescentes et à de l'eau Beschichtungsstoffe - Beschichtungsstoffe und Beschichtungssysteme für Holz im Außenbereich - Teil 6: Künstliche Bewitterung von Holzbeschichtungen mit fluoreszierenden UV-Lampen und Wasser

This European Standard was approved by CEN on 26 June 2006.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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# EN 927-6:2006 (E)

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### **Foreword**

This document (EN 927-6:2006) has been prepared by Technical Committee CEN/TC 139 "Paints and varnishes", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by February 2007, and conflicting national standards shall be withdrawn at the latest by February 2007.

EN 927 consists of the following parts under the general title "Paints and varnishes — Coating materials and coating systems for exterior wood":

- Part 1: Classification and selection;
- Part 2: Performance specification;
- Part 3: Natural weathering test;
- Part 5: Assessment of the liquid water permeability;
- Part 6: Exposure of wood coatings to artificial weathering using fluorescent UV lamps and water.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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## Introduction

Coatings from paints, varnishes and similar materials are weathered in a laboratory in order to simulate ageing processes which occur from natural weathering. Generally, a valid correlation between ageing during artificial and natural weathering cannot be expected due to a large number of influencing factors. Certain relationships can only be expected if the effect of the important parameters (spectral distribution of the irradiance in the photochemically relevant range, temperature of the specimen, type of wetting, wetting cycle relative humidity) on the coating is known. However, unlike natural weathering, testing in the laboratory is carried out taking into consideration a limited number of variables which can be controlled and therefore the results are more reproducible.



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