ICS 87.040 PREDBEŽNÁ SLOVENSKÁ TECHNICKÁ NORMA Október 2024

STN P	**Náterové látky Náterové systémy na listy rotora veterných turbín Časť 6: Stanovenie a hodnotenie adhézie ľadu pomocou centrifúgy (ISO/TS 19392-6: 2023)**	**STN P CEN ISO/TS 19392-6 67 2030**

Paints and varnishes - Coating systems for wind-turbine rotor blades - Part 6: Determination and evaluation of ice adhesion using centrifuge (ISO/TS 19392-6:2023)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/24

Táto predbežná slovenská technická norma je určená na overenie. Prípadné pripomienky pošlite do júla 2026 Úradu pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky.

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CEN ISO/TS 19392-6

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ICS 87.040

English Version

Paints and varnishes - Coating systems for wind-turbine rotor blades - Part 6: Determination and evaluation of ice adhesion using centrifuge (ISO/TS 19392-6:2023)

Peintures et vernis - Matériaux de revêtement pour pales de turbines éoliennes - Partie 6: Détermination et évaluation de l'adhésion de la glace à l'aide d'une centrifugeuse (ISO/TS 19392-6:2023)

Beschichtungsstoffe - Beschichtungssysteme für Rotorblätter von Windenergieanlagen - Teil 6: Bestimmung und Bewertung der Eisadhäsion mittels Zentrifuge (ISO/TS 19392-6:2023)

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European foreword

The text of ISO/TS 19392-6:2023 has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" of the International Organization for Standardization (ISO) and has been taken over as CEN ISO/TS 19392-6:2024 by Technical Committee CEN/TC 139 "Paints and varnishes" the secretariat of which is held by DIN.

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Endorsement notice

The text of ISO/TS 19392-6:2023 has been approved by CEN as CEN ISO/TS 19392-6:2024 without any modification.

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Paints and varnishes — Coating systems for wind-turbine rotor blades —

Part 6: Determination and evaluation of ice adhesion using centrifuge

Peintures et vernis — Matériaux de revêtement pour pales de turbines éoliennes —

Partie 6: Détermination et évaluation de l'adhésion de la glace à l'aide d'une centrifugeuse

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Foreword

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This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

A list of all parts in the ISO 19392 series can be found on the ISO website.

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Introduction

Ice accretion on rotor blade surfaces of wind turbines can decrease the efficiency and limit the performance of wind turbines in cold, humid environments. Ice formation can also lead to damage of the rotor blade and can be hazardous, if ice falls off the blade. Icephobic coatings (“icephobics”) can be applied to rotor blade surfaces to reduce or prevent the adhesion of ice by removing ice prior to reaching a critical ice mass for the rotor blades. They can also increase the efficiency of thermal ice protection systems.

Paints and varnishes — Coating systems for wind-turbine rotor blades —

Part 6: Determination and evaluation of ice adhesion using centrifuge

1 Scope

This document describes a method to measure ice adhesion from artificial ice on test substrates by using a centrifuge. Basic ice types are defined and test parameters for the ice removal are described to achieve reproducibility of test results for ice adhesion measurements for rotor blade coatings. This document does not intend to provide fixed test parameter to account for the diversity of relevant icing scenarios in this field of application.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1513, *Paints and varnishes — Examination and preparation of test samples*

ISO 4618, *Paints and varnishes —Vocabulary*

ISO 15528, *Paints, varnishes and raw materials for paints and varnishes — Sampling*

ISO 21920-2, *Geometrical product specifications (GPS) — Surface texture: Profile — Part 2: Terms, definitions and surface texture parameters*

SAE ARP 5905, *Calibration and Acceptance of Icing Wind Tunnels*