ICS 87.040 SLOVENSKÁ TECHNICKÁ NORMA Január 2024

STN	**Náterové látky Stanovenie odolnosti proti cyklickým podmienkam korózie Časť 3: Skúšanie náterových systémov na materiáloch a komponentoch v automobilovom priemysle (ISO 11997-3: 2022)**	**STN EN ISO 11997-3** 67 3107

Paints and varnishes - Determination of resistance to cyclic corrosion conditions - Part 3: Testing of coating systems on materials and components in automotive construction (ISO 11997-3:2022)

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. 12/23

Obsahuje: EN ISO 11997-3:2023, ISO 11997-3:2022

137880

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2024
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 11997-3

October 2023

ICS 87.040

English Version

Paints and varnishes - Determination of resistance to cyclic corrosion conditions - Part 3: Testing of coating systems on materials and components in automotive construction (ISO 11997-3:2022)

Peintures et vernis - Détermination de la résistance aux conditions cycliques de corrosion - Partie 3: Essais de systèmes de revêtements sur matériaux et composants en construction automobile (ISO 11997-3:2022)

Beschichtungsstoffe - Bestimmung der Beständigkeit bei zyklischen Korrosionsbedingungen - Teil 3: Prüfung von Beschichtungssystemen auf Werkstoffen und Bauteilen im Automobilbau (ISO 11997-3:2022)

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Ref. No. EN ISO 11997-3:2023 E

Contents

Page

European foreword

The text of ISO 11997-3:2022 has been prepared by Technical Committee ISO/TC 35 "General test methods for paints and varnishes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 11997-3:2023 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of an identical text or by endorsement, at the latest by April 2024, and conflicting national standards shall be withdrawn at the latest by April 2024.

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INTERNATIONAL STANDARD

ISO 11997-3

First edition
2022-07

Paints and varnishes — Determination of resistance to cyclic corrosion conditions —

Part 3: Testing of coating systems on materials and components in automotive construction

Peintures et vernis — Détermination de la résistance aux conditions cycliques de corrosion —

Partie 3: Essais de systèmes de revêtements sur matériaux et composants en construction automobile

Reference number
ISO 11997-3:2022(E)

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CP 401 • Ch. de Blandonnet 8
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Phone: +41 22 749 01 11
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Published in Switzerland

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Contents

Page

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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*.

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Introduction

This document was prepared on the basis of SEP 1850[9] and VDA 233-102[10].

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INTERNATIONAL STANDARD **ISO 11997-3:2022(E)**

Paints and varnishes — Determination of resistance to cyclic corrosion conditions —

Part 3: Testing of coating systems on materials and components in automotive construction

1 Scope

This document specifies a method based on a cyclic corrosion test for testing the corrosion protection of automobiles using coating systems on aluminium, steel or galvanized steel.

The test method uses corrosive conditions (temperature and humidity ramps and salt spray) to create realistic corrosion patterns. These corrosion patterns are typical for automobiles, and they are comparable in the case of sufficiently similar protective coating systems. In particular, the accelerated test investigates the delamination/corrosion creep that results from defined artificial damage to a coating. Investigations of surface and edge corrosion or investigations of adhesive specimens or components are also covered. This cyclic corrosion test is also suitable for testing corrosion in flanged areas or near gaps.

This document was developed for the assessment of coated substrates (test specimens, bodywork and mounted parts) in the automotive industry. Other applications, such as components with unpainted metallic coatings, were not part of the scope of the standardization work. This document was originally developed for coating systems on aluminium, steel or galvanized steel but it can also be used for the assessment of the corrosion resistance of coating systems on other metals and their alloys.

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 2409, *Paints and varnishes — Cross-cut test*

ISO 3574, *Cold-reduced carbon steel sheet of commercial and drawing qualities*

ISO 4618, *Paints and varnishes — Terms and definitions*

ISO 4628-1, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 1: General introduction and designation system*

ISO 4628-2, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 2: Assessment of degree of blistering*

ISO 4628-3, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 3: Assessment of degree of rusting*

ISO 4628-4, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 4: Assessment of degree of cracking*

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ISO 4628-5, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 5: Assessment of degree of flaking*

ISO 4628-8, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 8: Assessment of degree of delamination and corrosion around a scribe or other artificial defect*

ISO 4628-10, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 10: Assessment of degree of filiform corrosion*

ISO 9227:2017, *Corrosion tests in artificial atmospheres — Salt spray tests*

ISO 17872, *Paints and varnishes — Guidelines for the introduction of scribe marks through coatings on metallic panels for corrosion testing*

ISO 20567-1, *Paints and varnishes — Determination of stone-chip resistance of coatings — Part 1: Multi-impact testing*

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