

STN	Dosky na báze dreva Stanovenie voľného melamínu extrakciou a vysokoúčinnou chromatografiou (HPLC) s ultrafialovou detekciou	STN EN 18079 49 2514
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Wood-based panels - Determination of free melamine applying extraction and high-performance liquid chromatography (HPLC) with ultraviolet detection

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. 10/25

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EUROPEAN STANDARD

EN 18079

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EUROPÄISCHE NORM

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English Version

Wood-based panels - Determination of free melamine applying extraction and high-performance liquid chromatography (HPLC) with ultraviolet detection

Panneaux à base de bois - Détermination de la mélamine libre par extraction et chromatographie liquide à haute performance (HPLC) avec détection ultraviolette

Holzwerkstoffe - Bestimmung von freiem Melamin durch Extraktion und Hochleistungsflüssigkeitschromatographie (HPLC) mit Ultraviolett-Detektion

This European Standard was approved by CEN on 23 June 2025.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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EN 18079:2025 (E)

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European foreword

This document (EN 18079:2025) has been prepared by Technical Committee CEN/TC 112 “Wood-based panels”, 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of an identical text or by endorsement, at the latest by January 2026, and conflicting national standards shall be withdrawn at the latest by January 2026.

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

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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EN 18079:2025 (E)**Introduction**

Melamine is part of adhesives (melamine-urea-formaldehyde resins, MUF) and impregnation resins (melamine-formaldehyde-resins, MF) and is therefore present in wood-based products as well as products with a decorative wear layer. Fully cured products contain mainly chemically bound melamine, which makes the presence of free melamine unlikely.

Melamine (2,4,6-Triamino-1,3,5-triazine) is a heterocyclic, aromatic substance (CAS 108-78-1), see Figure 1. It is a white solid at room temperature with a melting point of 280 °C. It decomposes above this temperature. Melamine is poorly soluble in cold water. In hot water, melamine has a significantly higher solubility. Dimethyl sulfoxide (DMSO) is an inert solvent and capable for melamine quantification.

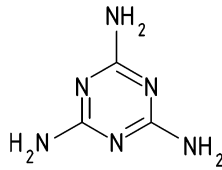


Figure 1 — Melamine structure (CAS: 108-78-1), molar mass 126,12 g/mol

1 Scope

This document specifies the determination of free melamine in coated and uncoated wood-based-panels.

NOTE 1 It is also applicable to other wood-based products, to other solid products e.g. impregnates or decorative paper and to liquid materials.

The determination of melamine is performed by extraction using dimethyl sulfoxide (DMSO) and subsequent high-performance liquid chromatography (HPLC) analysis and ultraviolet (UV) detection.

NOTE 2 For determination of melamine in foodstuff, EN 16858 is applicable. For determination of melamine in animal feeding stuffs, EN 17212 is applicable. For determination of melamine in textiles, EN ISO 1833-26 is applicable.

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.

EN 322, *Wood-based panels — Determination of moisture content*

EN 326-1, *Wood-based panels — Sampling, cutting and inspection — Part 1: Sampling and cutting of test pieces and expression of test results*

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