

SLOVENSKI STANDARD oSIST prEN 18124:2024

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Materiali za označevanje vozišča - Začasne označbe vozišča

Road marking materials - Temporary road markings

Straßenmarkierungsmaterialien - Temporäre Straßenmarkierungen

Produits de marquage routier - Marquages routiers temporaires

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English Version

Road marking materials - Temporary road markings

Straßenmarkierungsmaterialien - Temporäre Straßenmarkierungen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 226.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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European foreword

This document (prEN 18124:2024) has been prepared by Technical Committee CEN/TC 226 "Road Equipment", the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

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Introduction

Temporary road markings can be made by using preformed or non-preformed road marking materials.

Temporary 'preformed' road marking products are defined as tape, preformed cold plastic or preformed thermoplastic road marking.

Preformed road marking products are fully finished during manufacturing and do not change significantly their properties during application. They can be applied by means of adhesives, pressure or heat, with or without the use of a primer.

'Assemblies' (non-preformed road markings) are the base road marking material (paint, thermoplastic or cold plastic) together with the drop-on materials and / or premix glass beads needed to build up the applied road marking.

Temporary road markings are sometimes applied with a view for later removal and therefore the specific property of "removability" can be required. See Annex A for more detail.

There are two different concepts for the use of temporary road markings:

1) Apply temporary road markings side by side with the existing permanent road marking to delineate new lanes, e.g. in workzones.

In order to differentiate the relevant temporary markings from the existing permanent markings, a different colour may be used (e.g. yellow or orange). It is good practice to specify higher visibility performance for the temporary markings in respect to the permanent markings, to ensure superior visibility during all driving conditions, wet and rain.

In case that yellow temporary markings should be clearly differentiated from permanent white markings, it is recommended to specify the daytime colour class Y2. Also night-time colour may be specified.

Special care should be given for the road presence and good adhesion of preformed temporary road markings. Detailed application instructions, including the use of primers and the climatic conditions allowing the safe application of the preformed marking should be given by the manufacturer.

2) Remove or optionally mask the permanent road markings and delineate new lanes with temporary road markings. No special provisions are needed for this concept, any of the colours, also yellow of class Y1 may be used.

NOTE Attention is drawn to national requirements when removing or masking the permanent road marking, and to national specifications regarding the colours used.

Release of dangerous substances

National regulations on dangerous substances can require verification and declaration on release, and sometimes content, when construction products covered by this standard are placed on those markets.

In the absence of European harmonized test methods, attention is drawn to national provisions in the place of use regarding the verification and declaration on release/content.

NOTE An informative database covering European and national provisions on dangerous substances is available at the Construction website on EUROPA accessed through:

 $\frac{https://single-market-economy.ec.europa.eu/tools-databases/cp-ds-legislation-substances-construction-products\ en}{construction-products\ en}$

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1 Scope

This document specifies white, yellow and orange road markings, removable or non-removable, under the form of road marking assemblies or preformed road markings, to be used for temporary road markings in circulation areas. Other road marking products and colours intended for temporary road markings are not covered in this document.

This document also gives specifications for the evaluation of conformity of temporary road markings in circulation areas including type testing and factory production control.

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 1436:2018, Road marking materials — Road marking performance for road users and test methods

EN 1824:2020, Road marking materials — Road trials

EN 13197:2011+A1:2014, Road marking materials — Wear simulator Turntable

EN 13459:2011, Road marking materials — Sampling from storage and testing

3 Terms and definitions standards.iteh.ai

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- https://stand---dsISO Online browsing platform: available at https://www.iso.org/obp 33a/osist-pren-18124-2024
 - IEC Electropedia: available at https://www.electropedia.org/

3.1

temporary road marking

road marking that is used for a limited time, e.g. during the duration of a workzone

Note 1 to Entry: The durability expectation can be lower than for permanent road markings. Temporary road markings are sometimes applied with a view for later removal and therefore the specific property of "removability" can be required. See Annex A for more details.

3.2

preformed road marking

factory produced road marking system (or product), in sheet or roll form, capable of being applied to the substrate with adhesive, primer, pressure, heat or a combination of these

Note 1 to Entry: These types of products are fully finished during manufacturing and do not change significantly their properties during application.

3.2.1

tape

preformed multilayer road marking, capable of adapting itself to the texture of the substrate, which can be precoated with pressure-sensitive adhesive, capable of being stuck to the substrate without heating the material, while the photometric, colorimetric and skid resistance characteristics are not significantly modified during application

Note 1 to Entry: See EN 1790.

3.2.2

preformed cold plastic road marking

preformed road marking made of cold plastic marking material as defined in EN 1871:2020, applied to the substrate by means of an adhesive, while the photometric, colorimetric and skid resistance characteristics are not significantly modified during application

3.2.3

preformed thermoplastic road marking

"pre-beaded" preformed road marking made of thermoplastic marking material as defined in EN 1871:2020, applied to the substrate by heating the material until adhesion to the pavement and without the addition of any retroreflective and/or anti-skid drop-on materials during application to the road

Note 1 to entry: Additional materials to those described in 3.2.1 to 3.2.3 can include, if recommended by the manufacturer, primers which are liquid products which may contain solids and liquid additives suspended in an organic solvent or in water. The solids comprise inorganic and/or organic fillers, pigments and additives. The content of volatile organic solvents is not limited. Primers are used to precoat road surfaces before the road marking system is applied. They improve the adhesion of the road marking and protect against disintegration, discolouring, etc. caused by incompatible compounds in the road surface.

3.3

road marking assembly

<non-preformed road markings> paint, thermoplastic or cold plastic materials, with or without premix glass beads (see EN 1871, EN 1424) together with the precise application instructions including the identification of the manufacturer, dosages, types and proportions of drop-on materials (see EN 1423) and or premix glass beads needed to build up the applied road markings

Note 1 to entry: Road marking assemblies may also be applied in the form of stochastic or regular agglomerates (e.g., dots) to build a structured marking, typically to enhance visibility during wetness and rain.

Note 2 to entry: Every change to these is a new assembly and it is identified with the name of the base road marking material followed by the word assembly and a correlative number (e.g., Thermo AX – Assembly 1; Thermo AX – assembly 2, etc).

3.4

removability

characteristic of a temporary road marking capable of being removed without leaving permanent marks that could confuse the road user during different weather conditions.

Note 1 to entry: See Annex A for more details.

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