



BSI Standards Publication

Bitumens and bituminous binders — Sustainability — Review on how to address environmental information

National foreword

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A list of organizations represented on this committee can be obtained on request to its committee manager.

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English Version

Bitumens and bituminous binders - Sustainability - Review on how to address environmental information

Bitumes et liants bitumineux - Développement durable
- Revue de la manière de prendre en compte les
informations sur l'environnement

Bitumen und bitumenhaltige Bindemittel -
Nachhaltigkeit - Überprüfung des Umgangs mit
Umweltinformationen

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European foreword

This document (CEN/TR 18114:2024) has been prepared by Technical Committee CEN/TC 336 “Bitumens and bituminous binders”, the secretariat of which is held by AFNOR.

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Introduction

The Construction Products Regulation (CPR), which entered in force in 2011, specifies the need to address the sustainable use of natural resources in harmonised product standards (Basic Works Requirement 7 or BWR 7). The current Mandate M/124 and accepted replies do not address the CPR, therefore it is still not clear how in practice to address BWR 7 in product standards.

Once part of a Standardization Request (SReq), environmental sustainability assessment of bituminous binders needs to be addressed in the revision of the product standards for harmonisation. This raises the question of the need for drafting a CEN/TC 336 specific document giving guidelines on how to address sustainability in the product standards and how, in practical, to realize the corresponding assessments for bitumens and bituminous binders.

Work is ongoing in several CEN/TCs, either on horizontal level or per respective product groups. The information presented in this document was collected by the members of the task group environmental sustainability of the CEN/TC 336 at the time of drafting of this document, December 2023, and should therefore not be considered as exhaustive.

1 Scope

This document provides an overview of:

- current requirements in the European Union and in individual European states to address sustainability in the field of construction works where bitumens and bituminous binders are used;
- the requirements of the Construction Products Regulation (CPR) on environmental sustainability and analyses the implications for bitumens and bituminous binders;
- existing horizontal standard EN 15804:2012+A2:2019 related to core rules for the product category of construction products and assesses if it can be used without any additional documents for bitumen and bituminous binders;
- status of draft standards developed for specific complementary product category rules by CEN/TC 154, CEN/TC 227, CEN/TC 254 and any other relevant TCs, and assesses if these drafts could require any additional documents specific for bitumens and bituminous binders;
- other relevant documents.

This document is intended to provide support to CEN/TC 336 for assessing the need for any further standardization documents covering specific product category rules for bitumens and bituminous binders or for other standardization documents in the field of environmental sustainability of bituminous binders.

This document covers bitumens and bituminous binders as described in EN 12597, including cut-back and fluxed bituminous binder, and bitumen emulsion, as used in construction works.

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 12597, *Bitumen and bituminous binders — Terminology*

EN 15804:2012+A2:2019¹, *Sustainability of construction works — Environmental product declarations — Core rules for the product category of construction products*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12597, EN 15804:2012+A2:2019¹, and the following apply.

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

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

¹ As impacted by EN 15804:2012+A2:2019/AC:2021.

3.1

construction products regulation

CPR

regulation (EU) N° 305/2011 of the European parliament and of the council of 9 March 2011, laying down harmonised conditions for the marketing of construction products and repealing Council Directive N° 89/106/EEC

Note 1 to entry: Additional terms and definitions applicable to this document can be found in the CPR.

3.2

product category rules

PCR

set of specific rules, requirements and guidelines for developing environmental declarations for one or more product categories

3.3

complementary product category rules

c-PCR

product group specific or horizontal PCR, which provide additional compliant and non-contradictory requirements to EN 15804

3.4

life cycle assessment

LCA

compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle

3.5

life cycle inventory analysis

LCI

phase of life cycle assessment involving the compilation and quantification of inputs and outputs for a product throughout its life cycle

3.6

reference service life

RSL

service life of a construction product which is known to be expected under a set of reference in-use conditions and which can form the basis for estimating the service life under other in-use conditions

4 Abbreviations

EPD Environmental Product Declaration

PEF Product Environmental Footprint

5 Status of environmental requirements in the European Union and individual European states

Some countries in Europe have already implemented environmental requirements for construction and more specifically for asphalt materials, including certification system. The Scandinavian countries have been pioneers in developing EPD systems in accordance with EN 15804 since 2017. France has developed a system and data base for construction with FDES ("Fiche de Déclaration Environnementale et Sanitaire" — environmental health and safety data sheet) based on EN 15804 since 2014. The