Deutsches Institut für Bautechnik

Public-law institution jointly founded by the federal states and the Federation

European Technical Assessment Body for construction products

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European Technical Assessment ETA-24/0068 of 25 March 2024

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the European Technical Assessment:	Deutsches Institut für Bautechnik
Trade name of the construction product	KSM 2-Go
Product family to which the construction product belongs	Calcium carbonate filler aggregate with additional characteristics
Manufacturer	GODEL-BETON GmbH Glemsgaustraße 95A 70499 Stuttgart DEUTSCHLAND
Manufacturing plant	Natursteinwerke im Nordschwarzwald NSN GmbH & Co.KG Werk Magstadt Aichern 1 71106 Magstadt Deutschland
This European Technical Assessment contains	5 pages which form an integral part of this assessment
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of	260048-00-0301

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Specific Part

1 Technical description of the product

The calcium carbonate filler aggregate with additional characteristics "KSM 2-Go" is a filler aggregate obtained by processing (grinding) natural calcium carbonate for use in concrete. The calcium carbonate filler aggregate possesses the following additional characteristics according to EN 197-1, Clause 5.2.6 for limestone (LL):

- content of fines ≤ 1.20 g/100 g and
- total organic content (TOC) ≤ 0.20 % by mass.

Deviating from EN 197-1, Clause 5.2.6, for limestone (LL), the calcium carbonate filler aggregate with additional characteristics "KSM 2-Go" possesses the following characteristics:

- $CaCO_3$ content at least 65 % by mass and
- carbonate content ($CaCO_3$ + $MgCO_3$) at least 75 % by mass.

Furthermore, the chloride content complies with EN 197-1, Clause 7.3:

- chloride content ≤ 0.10 % by mass.

2 Specification of the intended use in accordance with the applicable European Assessment Document

The calcium carbonate filler aggregate "KSM 2-Go" is a type I addition for concrete conforming to European standard EN 206, i.e. concrete for structures cast in situ, precast structures, and structural precast products for buildings and civil engineering structures. The concrete can be mixed on site, ready-mixed or produced in a plant for precast concrete products. The calcium carbonate filler aggregate is also intended to be used for self-compacting concrete (SCC).

The calcium carbonate filler aggregate "KSM 2-Go" is also a specific addition that is intended to be used in combination with a specific cement according to the principles of the Equivalent Concrete Performance Concept (ECPC, see EN 206, 5.2.5.3). According to EN 206, Clause 5.2.5.1 (2) type I additions may be taken into account in the concrete composition with respect to the cement content and the water/cement ratio if the suitability has been established in provisions valid in the place of use.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of concrete incorporating the calcium carbonate filler aggregate "KSM 2-Go" of at least 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

Table 1 Mechanical resistance and stability (BWR 1)

Essential characteristic	Performance	
Particle size distribution	Sieve [mm]	Percentage passing by mass
	2	100 (100)
	0.125	95 (85-100)
	0.063	88 (70-100)
Specific surface (Blaine)	3840 cm^2/g	
Particle density	2.75 g/cm^3	
$CaCO_3$ content	71 % by mass[1] (≥ 65 % by mass)	
Content of fines (Clay content)	0.44 g/100g (≤ 1.20 g/100 g)	
Total organic content (TOC)	0.15 % by mass (≤ 0.20 % by mass)	
$MgCO_3$ content	12 % by mass[1]	
Chloride content (Cl^-)	0.05 % by mass (≤ 0.10 % by mass)	
Sulfate content (SO_3)	$AS_{0,2}$	
Total content of sulfur	Passed (≤ 1.0 % by mass)	
Constituents which alter the rate of setting and hardening of concrete	Passed	
Initial setting time	Control Mix: 150 min Test mix: 125/160/125 min	
Soundness	0.5 mm (≤ 10 mm)	

[1] with a carbonate content ($CaCO_3$ + $MgCO_3$) of individual value pairs ≥ 75 % by mass

Table 2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Content, emission and/or release of dangerous substances	No performance assessed

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with EAD No. 260048-00-0301 the applicable European legal act is: 1999/469/EC(EU).

The system to be applied is: 2+

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

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