



UTO

NATIONAL TECHNICAL APPROVAL



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CPC-UTO-19 / 229

CPC Belgelendirme Muayene ve Deneş Hizmetleri. Ltd. Şti., has been appointed as the National Technical Approval Organization with the Decision MGH / 2015-23 published in the Official Gazette dated 31/12/2015 and numbered 29579 by the Ministry of Environment and Urbanization.

Trade Name:	Composite Filling Material
UTO Subject:	Composite for binding and / or filling
UTO Owner:	ÇİMKO ÇİMENTO VE BETON SANAYİ TİCARET ANONİM ŞİRKETİ, BARTIN ŞUBESİ
Production Place :	Gölbucağı Mahallesi 114. Sokak No:72/8 Posta Kodu 74200 / BARTIN
Type and Usage of Building Material (Area Code):	Filling Material (15)
Date Issued:	22.11.2019 (rev01 19.01.2022)
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Annexes: Analysis report (1 page), FPC report (16 pages)

LEGAL BASIS

1. This CPC-UTO-19/229 CPC Certification Inspection and Experiment Services Trade. Ltd. Sti. has been prepared and published by CPC-RD-123 coded guide document in accordance with the legislation stated below.
 - 1.1 Law on the Preparation and Application of Basic Legislation on Products No. 4703.
 - 1.2 Building Materials Regulation published in the Official Gazette dated 10.07.2013 and numbered 28703 (305/2011 / EU)
 - 1.3 Regulation on the Criteria to be Subject to Construction Materials published in the Official Gazette dated 26.06.2009 and numbered 27270 Article 9.
2. This UTO, CPC Certification Inspection and Experiment Services Trade. Ltd. Sti. cannot be given or transferred to the manufacturer mentioned above and the production facility specified in UTO without their permission.
3. When deviation is detected in the factory production control plan and / or intended use, according to the article 15 of the Regulation on the Criteria to be Subject to Building Materials, this UTO, CPC Certification Inspection and Experiment Services Trade. Ltd. Sti. is suspended or cancelled by.
4. The reproduction / printing of the UTO should be made in full text, including its transmission in electronic form. Partial printing of approval CPC Certification Certification Inspection and Test Services Trade. Ltd. Sti. can be done with permission. In this case, partial printing (texts and drawings in advertising brochures etc.) should not contradict UTO and should not contain misleading statements.
5. UTO has a validity of 5 years and will remain valid if an annual surveillance audit is conducted.

Rev01/19.01.2022	Company title change
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SECTION 1 : NATIONAL TECHNICAL APPROVAL SUBJECT PRODUCT(S),SCOPE AND CONFIRMATION SYSTEM

1.1 Rationale for National Technical Approval

Composite Filling Material, with the proportion of %5-60 limestone or pozzolan, 95% -40% clinker or clinker and additive, is not defined in TS EN 413-1 "Mortar cement - Part 1: Composition, properties and conformity criteria" and TS EN 197-1 "Cement - Part 1: General Cements - Composition, Properties and Conformity Criteria" standards with its additive content of more than 1%. As per Article 9/2 of the Regulation on the Criteria to be Subject to Construction Materials, this guide document has been prepared for Composite Filling Material, which does not have a standard in terms of its use and content.

1.2 Product(s) Covered by National Technical Approval

Clinker: It is made by sintering a precisely determined mixture of raw materials (raw meal, paste or slurry) containing elements, usually expressed as oxides, CaO, SiO₂, Al₂O₃, Fe₂O₃ and a small amount of other material.

Limestone: It is a sedimentary rock composed of calcium carbonate salt used to obtain lime.

Additive: Containing the components specified in TS EN 197-1 Table 1 (Blast furnace slag, silica fume, pozzolan, fly ash, baked shale, limestone, minor additional components), bottom ash and slag types not found in TS EN 15167-1 are cement components.

Composite Filling Material: When mixed with water, finely ground %5-60 limestone or pozzolan, 95% -40% clinker or clinker and minor additive material, containing inorganic hydraulic binder, that set up with hydration reactions and processes, forming a hardening dough and maintaining its strength and stability even under water after hardening. The guide will be named as the product in the document.

Table 1. Composite Filling Material

	Composition by mass (%)			
	Clinker	Limestone	Pozzolan	Minor additives
High calcareous	35-95	5-60	-	0-5

1.3 Intended Use

The product can be used as binder and / or filler material in structures and building materials (as a mortar for building elements that do not participate in static work) in non-bearing mortars.

1.4 Protective Provisions and Restrictions for the Purpose of Use

The product cannot be used within the scope of TS EN 197-1 "General Cements" and outside the areas specified in Article 1.3. It should be noted that in the G mark to prevent this use, the product cannot be used as cement in the scope of TS EN 197-1, where it can only be used as binder and / or filling material in mortars. It cannot be used as a binder in reinforced concrete, levelling or slope concrete, in the production of mesh mortar on bearing walls and in the production of repair mortar.

1.5 Confirmation System

The product subject to the guiding document has been replaced by the European Commission's EU Commission Decision 2010/683 / EU and it has been determined as "System 1+" according to the commission decision 97/555 / EC.

SECTION 2: BASIC REQUIREMENTS AND VERIFICATION METHODS

2.1 Mechanical Strength and Stability

Table 2. Verification methods and Initial Type Test Analysis

Characteristic	Test Method	ITT Results
Compressive strength	EN 196-1	7 days 35,1 MPa
		28 days 43,8 MPa
Initial Setting Time	EN 196-3	150 min
Final Setting Time	EN 196-3	200 min
Expansion	EN 196-3	1 mm
Sulphate amount	EN 196-2	2,762 %
Chloride content	EN 196-2	0,0274 %
Water Retention	EN 413-2	86,04 %
Limit values are indicated in Table 3 within the national technical approval.		

2.2 Safety in Case of Fire

Building materials set out in the EU Commission Decision 96/603 / EC with the EU Commission Decision 2000/605 / EC, which lists the list of A1 class materials that do not contribute to the fire. Fire reaction performance classes are evaluated as A1 and A1fl without needing to be tested.

SECTION 3: PRODUCTION CONDITIONS

The product is obtained by grinding the finely ground %5-60 limestone or pozzolan, 95-40% clinker or clinker and additive material in the mills with a sufficient amount of gypsum. In addition, up to 5% minor contribution can be added if desired. The minor contribution will be reduced from the limestone rate to be added. While determining the characteristics of the product, analysis methods according to TS EN 413-1 standard are selected.

Table 3. Features, test methods, limit values, minimum test frequencies and statistical evaluation process for autocontrol tests performed by the manufacturer.

Characteristic	Test Method ^{a,b}	Limit Value		Autocontrol experiments			
				Minimum experiment frequency		Statistical evaluation process	
				Routine	In the starting period for the new type of product	Examination according to variables ^c	Examination according to qualifications ^d
Compressive strength	EN 196-1 ^d	7 days	≥7 MPa	1 in 2 weeks	2/week		X
		28 days	≥12 Mpa				
Initial Setting Time	EN 413-2	≥60 minutes		1 in 2 weeks	2/week		X
Final Setting Time	EN 413-2	≤6 hours (If the setting time is less than 6 hours) ≤15 hours (If the initial setting time is more than 6 hours)					
Expansion	EN 196-3	≤ 10 mm		1/Month	1/ week		X
Sulphate amount	EN 196-2	≤ 3,5%		1 in 2 weeks	2/ week		X
Chloride content	EN 196-2	≤ 0,10%		1/Month	1/ week		X
Sieve residue (90 µm)	EN 196-6	≤ 15%		1/Month	1/ week		X
Water Retention	EN 413-2	≥ 75%		1/Month	1/ week		X
<p>a) Where permitted in the relevant section of EN 196, methods other than those specified may be used; they give correlated results and are equivalent to those obtained by the reference method (excluding initial type test).</p> <p>b) The methods used to collect and prepare samples must comply with EN 196-7 requirements.</p> <p>c) If the data is not normally distributed, the evaluation method can decide on a case-by-case basis.</p> <p>d) See. TS EN 413-1 Section 5.3.6</p> <p>e) If the number of samples is at least 1 weekly during the control period, the evaluation can be done by the variables.</p>							

Table 4. Compliance assessment task distribution under System 1+.

Tasks	Task content	
Manufacturer responsibilities	Factory Production Control	Parameters for all characteristics related to use designed in Table 2
	Further experiments of samples taken from the factory	All characteristics related to the intended use in Table 2
UTO conformity assessment body responsibilities	Type Tests	Relevant characteristics of Table 2 regarding intended use
	Factory manufacturing control (at least once a year)	Parameters for all characteristics related to use designed in Table 2
	Inspection test of samples taken at the factory (at least 3 times a year)	Relevant characteristics of Table 2 regarding intended use

SECTION 4: TRANSPORTATION, PACKAGING, SHELF LIFE AND INSTALLATION CONDITIONS ON THE SITE

The product is transported as bagged and bulk by dry bulk trailer vehicles. The product can be used in building material production. The assembly state at the place of use is not a standalone product, but it is used after it turns into mortar or plaster.

SECTION 5 : PROTECTIVE PROVISIONS FOR PREVENTING USE FOR NON-PURPOSE OF NATIONAL TECHNICAL APPROVAL

The product subject to the national technical approval shall be used by the manufacturer for the purpose of using Article 1.3 according to these national technical approval conditions. CPC Certification Inspection and Experiment Services Ltd. Şti, after the technical approval, conformity assessment verification is made. According to the TS EN 197-2 standard, the factory must meet the production control system requirements.

SECTION 6: RESOURCES

TS EN 196-1 "Cement test methods - Part 1: Determination of strength" TSE, 2016, Ankara

TS EN 196-2 "Cement test methods - Part 2: Chemical analysis of cement", TSE, 2013, Ankara.

TS EN 196-3 "Cement test methods - Part 3: Setting times and expansion determination", TSE, 2010, Ankara.

TS EN 196-6 "Cement test methods - Part 6: Fineness determination", TSE, 2010, Ankara.

TS EN 197-1 "Cement - Part 1: General cements - Composition, properties and suitability criteria", TSE, 2012, Ankara.

TS EN 413-1 "Mortar cement- Part 1: Composition, properties and compatibility criteria", TSE, 2011, Ankara.

TS EN 413-2 "Cement - Mortar cement - Part 2: Test methods", TSE, 2010, Ankara.

EU Commission decision 1999/469 / EC, Brussels.

Communiqué on Conformity Verification Systems to be Subject to the Construction Materials Regulation (89/106 / EEC) published in the Official Gazette No.28365 dated 26 July 2012 and the Criteria to be Subject to Construction Materials.

Regulation on the Criteria to be Subject to Building Materials published in the Official Gazette dated 26 June 2009 and numbered 27270.

CPC-RD-123 "BINDING AND / OR FILLING COMPOSITE CEMENT", CPC, 2017, Ankara

This National Technical Approval, CPC Belgelendirme Muayene ve Deney Hizmetleri Tic. Ltd. Şti. The Certification Committee was examined and approved by its decision dated 22.11.2019.

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