

TÜRK STANDARDLARI ENSTİTÜSÜ DENEY ve KALİBRASYON MERKEZİ BAŞKANLIĞI API MALZEMELERİ YANGIN VE AKUSTİK LABORATUVAR MÜDÜRLÜĞÜ





161687

06-22

TURKISH STANDARDS INSTITUTION HEADSHIP OF TSE TEST and CALIBRATION CENTER CONSTRUCTION MATERIALS FIRE AND ACOUSTICS LABORATORY

AYDINLI MAH. ULUS SOK. NO:7/I TUZLA/ISTANBUL

MUAYENE VE DENEY RAPORU

TEST REPORT

Deneyi Talep Eden/Firma : (Adı, Adresi, Şehir vb.) Requesting/Customer (Name, Adress BORPAÍNT BOYA VE YALITIM TEKNOLOJÍLERÍ ÍNŞAAT SANAYÍ TÍCARET ANONÍM ŞIRKETÍ haskan boya susuz kümcevleri 218/1 Deney Talep Tarih / No : 7.04.2022 / 2022-61040

Numunenin Tanımı : (Cins, Marka, Sınıf, Tip, Tür, Model vb.) Sample Description (Type,Mark,Class,Mo

2022-086346, BORPAINT, BORPAINT, BORFIREPROOF, 1, 1.00, set

Numune Kabul Tarihi : 12.04.2022 30.05.2022 / 09.06.2022 Deneylerin Yapıldığı Tarih :

TS EN 13501-1/Yapı mamulleri ve yapı elemanları, yangın sınıflandırması bölüm 1: Yangın karşısındaki davranış deneylerinden elde edilen veriler kullanılarak sınıflandırma Uygulanan Standart Metot :

Raporun Sayfa Sayısı: Number of pages of the report Deney Sonucu :

Acıklamalar :

Yakarıda tanımlanın numune için laboratıvarımızda yapılan muzyene ve deneylerden elde edilen sonuçlar müteakip sayfalarda veriliniştir.
Tən taning and or menarement result are giren on the following pages which are part of fils report.

Deney laboratuvarlar olarıkta fallayış diserin TSB. Deney ve Kallarayan Merketa Başlamlığı Deney Laboratuvarları TÜRKAK'tan AB-6001-T ib TS

EN ISO/IEC 1703:7:817 standardının gire aberdite ediliniştir.

SER ISO/IEC 1703:7:817 standardının gire aberdite ediliniştir.

SER ISO/IEC 1703:7:817 standardının gire aberdite ediliniştir.

izei laboriner, pierkinem tamurhija konsunda Arruja Akreditayon Birliji (EA) Be Çok Tarilh Anlaşma ve Unskrarası Laboratuvar Kareditayon Birliji(ILAC) Be karşılıklı tamuna anlaşması inzahmutr.
EKEKLE iz estimati ve be karşınga eco-şenistin fer dererinlirinin (EA) Minitiatrai Agreement (MLA) and is the hiterational Laboratory Accreditation UREALE iz estimative be karşınga eco-şenistin fer dererinlirinin (EA) Minitiatrai Agreement (MLA) and is the hiterational Laboratory Accreditation Conspiration (ELC) Salmal Recognition Armagement (EAE) for the recognition of just reports.

The recognition of just reports.

The recognition of just reports.

The recognition of just reports.

rement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part

Kontrol Eden Tarih Deney Sorumlusu Onaylayan Head of Laborato

09.06.2022 ARDA ATAKOL SENCER GÜVEN

vann varsk izni olmsåns kamen kopvalarup ogglublamar. Imzauz ve karekoduz raporlar gogersizekr. Bu rapor, sadoce densyi iv w "Urtu Belgeai" yriting segoret. propolocid other than in file geogre with the written permission of the laboratory. Test reports without signature and seal are not inti only seard sample(s), and skall not be used as Product Crafficase.

Bu doküman elektronik ortanıda imzalanmıştır.
Doğrulama adresi: https://basvuru.tse.org.tr/uye/QRKodDogrulama?code=CCC186

TSE Inspection and Experiment Report

MUAYENE - DENEY SONUÇLARI TEST RESULTS

TSE DENEY ve KALİBRASYON MERKEZİ BAŞKANLIĞI YAPI MALZ. YANGIN VE AKUSTİK LAB.

HEADSHIP OF TSE TEST and CALIBRATION CENTER CONSTRUCTION MATERIALS FIRE and ACOUSTICS LAB.

2.2. Product Description		
General Description	Long-lasting construction topcoat paint with improved reaction the fire performance, that can be used on all kinds of surfaces.	
Trademark	BORPAINT	
Product Code	BORFIREPROOF	
Related Specification(s)	TS EN 1504-2:2005	

Samples Properties (Designated Features)		
Consumption rate	1.coat 2 kg/m ² 2.coat 2 kg/m ²	
Application	Roll brush	
Packaging	20 kg	

3. Test Reports and Results in Support of This Classification Report

vere taken into account in the determination of this classification

aboratory Sponsor		Test Report Reference No	Test Method
TSE Construction Materials Fire and	BORPAİNT BOYA VE YALITIM TEKNOLOJİLERİ İNŞAAT SANAYİ TİCARET ANONIM ŞİRKETİ	161594	TS EN ISO 1716: 2018-11
Acoustics Laboratory		06-22	
TSE Construction Materials Fire and	BORPAINT BOYA VE YALITIM TEKNOLOJILERI İNŞAAT SANAYI TİCARET ANONIM ŞIRKETİ	161679	TS EN 13823+A1: 2015-02
Acoustics Laboratory		06-22	

Results of the test reports mentioned in 3.1 and the classification criteria corresponding to class A2-s1,d0 as stated in TS EN 13501-1: 2019 are given in the following table.

Test Method	Parameter	Number of Tests	Test Results	
1 est Method			Mean of continous parameters	Non-continous parameters
TS EN ISO 1716	For substantial component Qpcs ≤3,0 MJ/kg	3	1,499	(-)
	FIGRA _{0,2} ≤ 120 W/s	3	9,01	(-)
	FIGRA _{0,4}		9,01	(-)
	THR _{600s} ≤ 7,5 MJ		1,09	(-)
TS EN 13823+A1	LFS < Edge of the sample		(-)	LFS < Edge
15 EN 13025+A1	$SMOGRA \le 30 \text{ m}^2/\text{s}^2$		0,00	(-)
	$TSP_{600s} \le 50 \text{ m}^2$	I	8,27	(-)
	No flaming droplets in 600 s		(-)	No flaming droplets

(-) Not applicable

TSE Inspection and Experiment Report



TSE DENEY ve KALİBRASYON MERKEZİ BAŞKANLIĞI YAPI MALZ. YANGIN VE AKUSTİK LAB. HEADSHIP OF TSE TEST and CALIBBATION CENTER CONSTRUCTION MATERALS FIRE and ACOUSTICS LAB.

MUAYENE - DENEY SONUÇLARI TEST RESULTS

4. Classification and Direct Field of Application

This classification has been carried out in accordance with clause 11.7.3, clause 11.9.2 and clause 11.10.1 of TS EN 13501-1: 2019

4.2. Classification
In relation to its reaction to fire behaviour, the product "tradamarked BORPAINT, with product code BORFIREPROOF, Long-lasting construction topcoat paint with improved reaction the fire performance, that can be used on all kinds of surfaces," has been classified as:

In relation to its reaction to fire behaviour, the product "trademarked BORPAINT, with product code BORFIREPROOF, Long-lasting construction topcoat paint with improved reaction the fire performance, that can be used on all kinds of surfaces," has been classified as:

In relation to its reaction to fire behaviour, the product "trademarked BORPAINT, with product code BORFIREPROOF, Long-lasting construction topcoat paint with improved reaction the fire performance, that can be used on all kinds of surfaces," has been classified as:

Fire behaviour	Smoke production	Flaming droplets		
A2	s1	d0		
REACTION TO FIRE CLASS: A2-s1,d0				

4.3. Field of Application

This classification is valid for the products manufactured with the same recipe, same type, under the same product name in the following end use applications.

Substrate	Applications involving the fixing of the product to a substrate with reaction to fire class of at least A2+1,d0 (thickness≥ 12 mm, density≥ 525 kg/m³, including gypsum plasterboard surfaces)
Consumption rate	4 kg/m² (applied as two coats)

5. Limitations At the time of publishing of the standard TS EN 13501-1: 2019, there wasn't any decision concerning the duration of validity of a classification report.

The present document represents neither type approval nor certification of the product.

End of classification report.

TSE Inspection and Experiment Report



INSPECTION REPORT

EUROLAB LABORATORY SERVICES GROSET TOURS SORTEGE VERSIONS



2022110456 BORPAINT Yahtım ve Boya Teknolojileri ing, Tic. A.Ş.

Report No: Applicant: Contact Person: A. Elvem NEFES

Telephone: 0312 366 72 70 Contact e-mail:

ekrem@hai 09.03.2022 12.04.2022 Sample Accepted on: Report Date: Total number of pages: 4 (Pa)

Sample ID: BORPAINT BOYA

TEST	метноо	SPECIMEN	RESULT
Thermal Performance Of Building Materials And Products Determination Of Thermal Resistance By Means Of Guarded Hot Plate And Heat Flow Methods — Dry And Moist Products Of Medium And Jow Thermal Resistance	EN 12664	BORPAINT BOYA	6.07345 W/(= 6)





Her MH, Dr. Ballin Alverei Cast. No. 10044 S 6AGCE,AR / ISTA 746 3010 700 2019 - Hop. 4212 906 21 16

Eurolab Inspection and Experiment Report





S



BORPAINT

BORPAINT BOYA VE YALITIM TEKNOLOJİLERİ İNŞ. SAN. TİC. A. Ş.

SCZ MAR, NOSCZ MARALLEN KÖME EVLERI NOZIRT VENIMARIALI DANKARA/TÜRÜTE

ISO 9001:2015

BOR MENERALLI YALITIM MAJZEMELERIOC VE DIS CEPUE DI YALITIM BOYALARI. Yangena dan anbali boyalar, cati da yalitim boyalari ye siyalari fartim. Yurenci satis ye hihalat hizmetleri.

PROBLETION, HOMESTIC SALES AND EXPORT SERVICES OF BOKON MENUAL.
SSELATION MATERIALS OFFICIAL OF THE MALE PROBLETION OF FAIN
FIRE RENSTANT OF FAINTS, ROOF THE MALE INSELATION OF FAINTS AND FLATERS.



ISO 9001:2015

Ĭ RTI Ш O R Ø S





BORPAİNT BOYA VE YALITIM TEKNOLOJILERI İNŞ. SAN. TİC. A. Ş.

SENCY MAIN SUSEY MAHARLESI KÜME ESSERI WIZIRT SENIMAHALI KANKARATERKESE

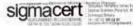
ISO 10002:2018

ROB NINTRALLI VALITON MALZEMILLIRI (IÇ VE DIŞ CEPRIC BILYALITIN BIŞVALARI, VAMUNA DAVANIRLI BIRYALAR, ÇATI 151 VALITIM BIŞVALARI VE SIVALARIŞ ÎRETÎM, VERTÎÇÎ SATÎS VE DIRACAT RIZMETLERÎ

PRODUCTION, BOWESTIE NALES AND EXPORT ALBY BUTS OF BORDS MISSEAL ESSELATION MATERIALS INVERTOR AND EXTENDED THERMAL INSLATION OF PAINTS, THE RESISTANT OF PAINTS, BORD THERMAL INSULATION OF PAINTS AND FLANTING.

Strige 1811 Facebrookse Presiden Skillere Feder Frige of Strike Frig Strike Feder Frige of English Strike Strike Frige of English 7.01.2922 TAR.3623 6.01.3623





ISO 10002:2018

ď Ш U ĸ Ø

S





BORPAINT BOYA VE YALITIM TEKNOLOJİLERİ İNŞ. SAN. TİC. A. Ş.

ISO 14001:2015

BOR MÜNERALLİ YALITIN MALIZMELERİJÜ, YE DIŞ CEPHE, BU YALITIM BOYALADI. YANUNA DAYANIKLI BOYALAR, ÇATI DE VALITON BOYALARI VE SIVALABIŞ ÜRETİM, VERTİÇI SAYSEVE BURACA YERÜNEYLERİ

PROBUCTION, DOMESTIC SALES AND EXPORT SERVICES OF HORDIN SUSPERAL. CLATHEN SCATEGUALS INSTITUTOR AND EXTERIOR THERMAL OSCULATION OF PAINTS, ILL RESISTANT OF PAINTS, BOOF THERMAL INSULATION OF PAINTS AND FLASTERY.

Bidder Tarki Taran Serial for

7.01.3032

181,1927



sigmacert

ISO 14001:2015

œ Ш C R Ø S





BORPAINT BOYA VE YALITIM TEKNOLOJİLERİ İNŞ. SAN. TİC. A. Ş.

SUBSEZ MAN NUMEZ MANNALERSI KÜME EVLENI MOYDEN MENDIANNELER ANN ARA TÜRKÜME

ISO 45001:2018

BOR MINERALLÉ VALTEM MALEZHELET DE C. VE DOS CEPHE DE FALTEM DOVALARIL VAMIRNA DAVANIKLE ROVALARI, CAVI DE VALETHE ROVALARIL VE SIVALARIL ROMENTE. VERTICE SAVED SE MENCE AT LEGISLATION DE LA VIDA DE MINERAL, INSELATION MATERIALS INTERIOR AND EXTERIOR TRUSKAR, INSELATION OF PAINTS AND PAINTS, FIRE RESISTANT OF PAINTS, ROOF TRUSKAL INSELATION OF PAINTS AND PLANTERS.

St Eart Links (See of Sond top

MINGRASI T-03-2022 T-03-2022

4.63(302)



sigmacert

ISO 45001:2018















Canakkale Onsekiz Mart Üniversitesi



<u>CEKAM, Enerji Kaynakları Uygulama ve Araştırma Merkezi</u>

Determination of Thermal Conductivity (*) Report No/Date: 15.03.2021 Application No/Date: 15.01.2021

BORPAİNT BOYA VE YALITIM TEKNOLOJİLERİ İNŞAAT SANAYİ TİCARET ANONİM ŞİRKETİ

The thermal conductivity determination of the BORPAINT BOR MINERALLI IC DIS CEPHE ISI YALITIM BOYASI producing in your company conductivity tests. The experimental results are collected following.

DETERMINATION OF THERMAL CONDUCTIVITY

Thermal conductivities of the specimens were obtained by heat flow meter apparatus according to ISO 8301 standard. Specimens having the dimensions of 30 cm x 30 cm were used in experimental study. λ values are given in the Table below.

Specimen #	Specimen thickness (mm)	Thermal conductivity coefficent λ, (W/mK) (**)
1	1,7	0,020
2	1,8	0,021
3	2,0	0,021
	Average	0,021

Issuing of this document in any press is not allowed.

(*) This report is the English translation of the Turkish version having the same repo (**) Thermal conductivity coefficient is independent from thickness. In order to obtain insulation performance from two materials having same thermal conductivity coeffic-should be applied with the same thickness.

Doc. De Ugur Cengiz ÇEKAM Müdür Yrd. ÇEKAM Müdürü

BORPAINT CEKAM Inspection and Experiment Report



Canakkale Onsekiz Mart Üniversitesi



CEKAM, Enerji Kaynakları Uygulama ve Araştırma Merkezi

Determination of Thermal Conductivity (*) Report No/Date: 15.03.2021 Application No/Date: 15.01.2021

BORPAİNT BOYA VE YALITIM TEKNOLOJİLERİ İNŞAAT SANAYİ TİCARET ANONİM ŞİRKETİ

Determination of thermal conductivity tests were carried out on the material named as BORROOF PAINT by producer. Test results are given below.

DETERMINATION OF THERMAL CONDUCTIVITY

Thermal conductivities of the specimens were obtained by heat flow meter apparatus according to ISO 8301 standard. Specimens having the dimensions of 30 cm x 30 cm were used in experimental study, λ values are given in the Table below.

Specimen #	Specimen thickness (mm)	Thermal conductivity coefficent λ, (W/mK) (**)
1	1,7	0,021
2	1,6	0,020
3	1,9	0,021
	Average	0.021

Issuing of this document in any press is not allowed.

(*) This report is the English translation of the Turkish version having the same (**) Thermal conductivity coefficient is independent from thickness. In order to insulation performance from two materials having same thermal conductivity co should be applied with the same thickness.

Doc. D. Uğu Cengiz CEKAM Müdür Yrd.

Doc Dr. Necati Kaya CEKAM Müdürü

BORROOF CEKAM Inspection and Experiment Report



Çanakkale Onsekiz Mart Üniversitesi



<u>ÇEKAM, Enerji Kaynakları Uygulama ve Araştırma Merkezi</u>

Determination of Fire Resistance (*) Report Date: 15.03.2021 Application Date: 15.01.2021

BORPAİNT BOYA VE YALITIM TEKNOLOJİLERİ İNŞAAT SANAYİ TİCARET ANONİM ŞİRKETİ

The fire resistance determination of the BORFIREPROOF BOR MINERAL FIRE-RESISTANT PAINT producing in your company was made by a flame test. The experimental results are collected following.

FIRE RESISTANCE DETECTION

- 1. The BORFIREPROOF BOR MINERAL FIRE-RESISTANT PAINT specimen which is coated on Styrofoam foam 50 cm X 30 cm sized was applied flame for 120 minutes from 10 cm. (Average 1450 °C),
- 2. The BORFIREPROOF BOR MINERAL FIRE-RESISTANT PAINT specimen which is coated on drywall sheet 25 cm X 25 cm sized was applied flame for 120 minutes from 10 cm. (Average 1450 $^{\circ}$ C),
- The BORFIREPROOF BOR MINERAL FIRE-RESISTANT PAINT specimen which is coated on cardboard 50 cm X 30 cm sized was applied flame for 120 minutes from 10 cm. (Average 1450 $^{\circ}{\rm C}),$

In all three experiments, it is observed that there is no ignition and no flames on the surface of samples exposed to flame for 120 minutes.

(*) This report is the English translation of the Turkish version having the same report date.

Vails Doc. Dr. Ugur Cengiz ÇEKAM Müdür Yrd.

BORFIREPROOF CEKAM Inspection and Experiment Report



Canakkale Onsekiz Mart Üniversitesi



CEKAM, Enerji Kaynakları Uygulama ve Araştırma Merke

Determination of Thermal Conductivity (*) Report No/Date: 15.03.2021 Application No/Date: 15.01.2021

Determination of thermal conductivity tests were carried out on the material named as **BORSTUCCO** by producer. Test results are given below.

DETERMINATION OF THERMAL CONDUCTIVITY

Thermal conductivities of the specimens were obtained by heat flow meter apparatus according to ISO 8301 standard. Specimens having the dimensions of 30 cm x 30 cm were used in experimental study. $\boldsymbol{\lambda}$ values are given in the Table below.

Specimen #	Specimen thickness (mm)	Thermal conductivity coefficent λ, (W/mK) (**)
1	3,0	0,020
2	3,5	0,019
3	4,0	0,020
	Average	0,020

Issuing of this document in any press is not allowed.

(*) This report is the English translation of the Turkish version having the same report number.
(*) Thermal conductivity coefficient is independent from thickness. In order to obtain the same thermal insulation performance from two materials having same thermal conductivity coefficient value, the materials are applied with the same thickness.

Doc Dr. Uğur Cengiz ÇEKAM Müdür Yrd.

BORSTUCCO CEKAM Inspection and Experiment Report

