

# **CEM I 42,5R** PORTLAND CEMENT PRODUCT TECHNICAL DATA SHEET

#### **MANUFACTURER:**

Adana Cimento Sanayii Türk A.S. Ceyhan Yolu Uzeri 12. Km. PK.10

01321 - Adana/TURKIYE

: +90 322 3329950 Phone Fax : +90 322 3329732

Website : www.adanacimento.com.tr

#### PRODUCT DESCRIPTION:

Finely ground portland cement clinker mixed with a small amount of gypsum (calcium sulfate dihydrate).

The portland cement clinker is made by heating to high temperature a mixture of substances such as limestone, sand, clay and shale. Portland cement is essentially hydraulic calcium silicates contained in a crystalline mass, not separable into individual components.

#### **CHEMICAL PROPERTIES:** Major compounds are:

Clinker	CAS # 65997-15-1
Limestone	CAS # 1317-65-3
Gypsum	CAS # 13397-24-5

#### **PHYSICAL PROPERTIES:**

Properties	Standard Requirements	Avg. Values
SO3 (%)	≤ 4	2,90
Insoluble residue (%)	≤ 5	0,35
Loss on ignition (%)	≤ 5	2,25
Initial setting time(min.)	min. 60	140
2 Days compressive str, (MPa)	min. 20	26
28 Days compressive str, (MPa)	min. 42,5-62,5	50

#### **QUALITY CONTROL:**

Strict quality assurance and quality control procedures are applied to ensure optimum product performance and uniformity. Product meets all the requirements of TS-EN 197-1:2002 standards and has EC - Certificate of Conformity approved by Council for Quality and Environment.

Also Adana Cement Industry Inc. has Integrated Management System which consists TS-EN-ISO 9001:2008 Quality Management System, TS-EN-ISO 14001:2005 Environmental Management System, OHSAS 18001:2014 Occupational Health & Safety Management System and TS-EN-ISO 50001:2011 Energy Management System.

## **PRECAUTIONS:**

Portland cement is a light gray or white powder. When mixed with water, portland cement becomes highly caustic (pH > 12) and will damage or burn (as severely as third-degree) the eyes or skin. Inhalation may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system or may cause or may aggravate certain lung diseases or conditions. Use exposure controls or personal protection methods described in SDS.

#### **DELIVERY:**

Transportation is by rail, road or ship – in bag or bulk form. Keep in moisture-proof containers/silos to prevent hardening.



# CEM II/B-M (S-V) 42,5R PORTLAND COMPOSITE CEMENT PRODUCT TECHNICAL DATA SHEET

#### **MANUFACTURER:**

Adana Çimento Sanayii Türk A.Ş. Ceyhan Yolu Uzeri 12. Km. PK.10 01321 – Adana/TURKIYE

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Fax : +90 322 3329732

Website : www.adanacimento.com.tr

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#### PRODUCT DESCRIPTION:

Finely ground portland cement clinker mixed with blast furnace slag, fly ash and a small amount of gypsum (calcium sulfate dihydrate).

The portland cement clinker is made by heating to high temperature a mixture of substances such as limestone, sand, clay and shale.

Phone

#### **CHEMICAL PROPERTIES:** Major compounds are:

Clinker	CAS # 65997-15-1
Fly Ash	CAS# -
Blast Furnace Slag	CAS # 65996-69-2
Gypsum	CAS # 13397-24-5

#### **PHYSICAL PROPERTIES:**

Properties	Standard Requirements	Avg. Values
SO3 (%)	≤ 4,0	3,00
CI (%)	≤ 0,1	0,0200
Initial setting time(min.)	min. 60	220
2 Days compressive str, (MPa)	min. 20	22,0
28 Days compressive str, (MPa)	min. 42,5-62,5	46,0

#### **QUALITY CONTROL:**

Strict quality assurance and quality control procedures are applied to ensure optimum product performance and uniformity. Product meets all the requirements of TS EN 197-1:2012 standards and has EC – Certificate of Conformity approved by Council for Quality and Environment.

Also Adana Cement Industry Inc. has Integrated Management System which consists TS-EN-ISO 9001:2015 Quality Management System, TS-EN-ISO 14001:2005 Environmental Management System, OHSAS 18001:2014 Occupational Health & Safety Management System and TS-EN-ISO 50001:2011 Energy Management System.

## PRECAUTIONS:

Composite cement is a gray powder. When mixed with water, it becomes highly caustic (pH > 12) and will damage or burn (as severely as third-degree) the eyes or skin. Inhalation may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system or may cause or may aggravate certain lung diseases or conditions. Use exposure controls or personal protection methods described in SDS.

## **DELIVERY**:

Transportation is by rail, road or ship – in bag or bulk form. Keep in moisture-proof containers/silos to prevent hardening.

OYAK ÇİMENTO	ANALİZ RAPORU Analysis Report
Rapor Tarihi Report Date	24.10.2020
Rapor No Report No	Tipik Analiz /Typical Analysis
NUMUNENÎN ADI Sample Type	CEM III/A 42,5 N (TS EN 197-1:2012)
ALINDIĞI YER Sample Taken Place	OYAK Çimento Fabrikaları A.Ş. / İskenderun Tesisleri Şubesi
NUMUNENÍN TEMSÍL ETTÍĞÍ DÖNEM Time Period	-
DENEY LABORATUVARI Testing Laboratory	OYAK Çimento Fabrikaları A.Ş. / İskenderun Tesisleri Şubesi Laboratuvarı
GEMİ ADI Vessel's Name	-
YÜKLENEN MİKTAR Loaded Quantity	-
KONŞİMENTO TARİH&NO Date&No. Of B/L	-
YÜKLEME LİMANI Port Of Loading	-
BOŞALTMA LİMANI Port Of Discharge	-

KİMYASAL ÖZELLİKLER CHEMICAL REQUIREMENTS		ELDE EDİLEN DEĞERLER Obtained Results	TS EN 197-1 SINIR DEĞERLERİ  EN 197-1 Standard Limit Values	DENEY METODLARI  Test Methods
Kükürt Trioksit (SO <sub>3</sub> ) Sulfur Trioxid	%	2,76	Max. 4,0	TS EN 196-2
Klorür (Cl <sup>-</sup> ) Chloride	%	0,0133	Max. 0,1000	TS EN 196-2
Kızdırma Kaybı Loss on Ignition	%	2,40	Max. 5,0	TS EN 196-2
Çözünmeyen Kalıntı Insoluble Residue	%	0,62	Max. 5,0	TS EN 196-2
Suda Çözünen Krom (VI) Insoluble Chromium (VI)	ppm	< 1,0	Max. 2,0	TS EN 196-10
FİZİKSEL ÖZELLİKLER PHYSICAL REQUIREMENTS				
Özgül ağırlık Specific Gravity	gr/cm <sup>3</sup>	3,00	-	TS EN 196-6
Özgül Yüzey Specific Surface	cm²/g	5220	-	TS EN 196-6
Priz Başlangıcı Initial Setting Time	dakika <i>minute</i>	220	Min. 60	TS EN 196-3
Hacim Genleşmesi Soundness (Le Chatelier)	mm	1	Max. 10	TS EN 196-3
2 Günlük Basınç Dayanımı 2 Days Compressive Strength	MPa	21,0	Min. 10,0	TS EN 196-1
28 Günlük Basınç Dayanımı 28 Days Compressive Strength	MPa	46,0	Min. 42,5- Max. 62,5	TS EN 196-1

Arif ACER Kalite Kontrol Uzmanı Quality Control Specialist

Bu rapor deney laboratuvarının izni olmadan çoğaltılamaz. This report cannot be copied without permission of the test laboratory.

Deney sonuçları yukarıda tanımlanan numuneye aittir.

\*Harmonize ürün standardında tanımlı bir gereklilik bulunmamaktadır.

\*Test results belong to the sample defined above.

\*There is no defined requirement in the harmonized standard.



# CEM V/A (S-V) 32,5R COMPOSITE CEMENT PRODUCT TE CHNIC ALD AT A S HE E T

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Website : www.adanacimento.com.tr

#### PRODUCT DESCRIPTION:

Finely ground portland cement clinker mixed with blast furnace slag, fly ash and a small amount of gypsum (calcium sulfate dihydrate).

The portland cement clinker is made by heating to high temperature a mixture of substances such as limestone, sand, clay and shale.

Phone

#### **CHEMICAL PROPERTIES:** Major compounds are:

Clinker	CAS # 65997-15-1
Fly Ash	CAS# -
Blast Furnace Slag	CAS # 65996-69-2
Gypsum	CAS # 13397-24-5

#### **PHYSICAL PROPERTIES:**

Properties	Standard Requirements	Avg. Values
SO3 (%)	≤ 3,50	2,00
CI (%)	≤ 0,1	0,0160
Initial setting time(min.)	min. 75	220
2 Days compressive str, (MPa)	min. 10	14,0
28 Days compressive str, (MPa)	min. 32,5-52,5	36,0

#### **QUALITY CONTROL:**

Strict quality assurance and quality control procedures are applied to ensure optimum product performance and uniformity. Product meets all the requirements of TS EN 197-1:2012 standards and has EC – Certificate of Conformity approved by Council for Quality and Environment.

Also Adana Cement Industry Inc. has Integrated Management System which consists TS-EN-ISO 9001:2015 Quality Management System, TS-EN-ISO 14001:2005 Environmental Management System, OHSAS 18001:2014 Occupational Health & Safety Management System and TS-EN-ISO 50001:2011 Energy Management System.

## PRECAUTIONS:

Composite cement is a gray powder. When mixed with water, it becomes highly caustic (pH > 12) and will damage or burn (as severely as third-degree) the eyes or skin. Inhalation may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system or may cause or may aggravate certain lung diseases or conditions. Use exposure controls or personal protection methods described in SDS.

# **DELIVERY**:

Transportation is by rail, road or ship – in bag or bulk form. Keep in moisture-proof containers/silos to prevent hardening.



# CEM I 52,5R PORTLAND CEMENT PRODUCT TECHNICAL DATA SHEET

#### **MANUFACTURER:**

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Website : www.adanacimento.com.tr

#### PRODUCT DESCRIPTION:

Finely ground portland cement clinker mixed with a small amount of gypsum (calcium sulfate dihydrate).

The portland cement clinker is made by heating to high temperature a mixture of substances such as limestone, sand, clay and shale. Portland cement is essentially hydraulic calcium silicates contained in a crystalline mass, not separable into individual components.

#### **CHEMICAL PROPERTIES:** Major compounds are:

Clinker	CAS # 65997-15-1
Limestone	CAS # 1317-65-3
Gypsum	CAS # 13397-24-5

#### **PHYSICAL PROPERTIES:**

Properties	Standard Requirements	Avg. Values
SO3 (%)	≤ 4	3,15
Insoluble residue (%)	≤ 5	0,20
Loss on ignition (%)	≤ 5	2,80
Initial setting time(min.)	min. 45	125
2 Days compressive str, (MPa)	min. 30	37,5
28 Days compressive str, (MPa)	min. 52,5	62,0

#### **QUALITY CONTROL:**

Strict quality assurance and quality control procedures are applied to ensure optimum product performance and uniformity. Product meets all the requirements of TS-EN 197-1:2012 standards and has EC – Certificate of Conformity approved by Council for Quality and Environment.

Also Adana Cement Industry Inc. has Integrated Management System which consists TS-EN-ISO 9001:2015 Quality Management System, TS-EN-ISO 14001:2005 Environmental Management System, OHSAS 18001:2014 Occupational Health & Safety Management System and TS-EN-ISO 50001:2011 Energy Management System.

#### PRECAUTIONS:

Portland cement is a light gray or white powder. When mixed with water, portland cement becomes highly caustic (pH > 12) and will damage or burn (as severely as third-degree) the eyes or skin. Inhalation may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system or may cause or may aggravate certain lung diseases or conditions. Use exposure controls or personal protection methods described in SDS.

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