

APHTAB Trade Group

Supplier of aluminum hydroxide

and aluminium oxide (Alumina)

AT100

Calcined Alumina

TECHNICAL DATASHEET

PRODUCT INFORMATION

Calcined aluminum oxide Al_2O_3 , mainly alpha phase, with a standard soda content.

This grade is used for the production of standard bricks, fibers, frits, glaze, and welding fluxes.

CHARACTERISTICS

Physical Characteristics	Unit	Typical Value
Particle Size Distribution		
D50	μm	75
< 30 μm	%	15
< 120 μm	%	99
Specific Surface Area	m^2/g	1.5
Loss On Ignition 20°C / 1000°C	%	0.5
Chemical Characteristics	Unit	Typical Value
Al_2O_3	%	99.4
Alpha Alumina Content	%	85~90
Na_2O total	ppm	3900
CaO	ppm	150
SiO_2	ppm	140
Fe_2O_3	ppm	150

Valid After: 2017/01

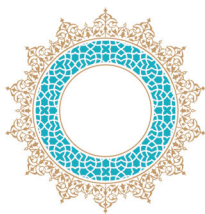
APHTAB, Iran

Tel: +98(21)66907325

Cell: +989125267996

Cell: +989224538003

www.aphtab.com



APHTAB Trade Group

Supplier of aluminum hydroxide

and aluminium oxide (Alumina)

AT120

Calcined Alumina

TECHNICAL DATASHEET

PRODUCT INFORMATION

Calcined aluminum oxide Al_2O_3 , mainly alpha phase, with a Medium soda content.

This grade is used for the production of technical parts, standard bricks, fibers, frits, glaze, and welding fluxes.

CHARACTERISTICS

Physical Characteristics	Unit	Typical Value
Particle Size Distribution		
D50	μm	75
< 30 μm	%	15
< 120 μm	%	99
Specific Surface Area	m^2/g	1.5
Loss On Ignition 20°C / 1000°C	%	0.5
Chemical Characteristics	Unit	Typical Value
Al_2O_3	%	99.6
Alpha Alumina Content	%	90~95
Na_2O total	ppm	1800
CaO	ppm	150
SiO_2	ppm	140
Fe_2O_3	ppm	150

Valid After: 2017/10

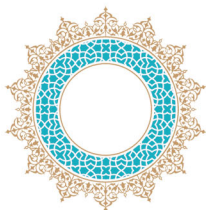
APHTAB, Iran

Tel: +98(21)66907325

Cell: +989125267996

Cell: +989224538003

www.aphtab.com



APHTAB Trade Group

Supplier of aluminum hydroxide

and aluminium oxide (Alumina)

AT145

Hard Calcined Alumina

TECHNICAL DATASHEET

PRODUCT INFORMATION

Hard calcined aluminum oxide Al_2O_3 , mainly alpha phase, with a medium soda content.

This grade is used for the production of standard bricks, refractory cement, castables, abrasives and welding fluxes.

CHARACTERISTICS

Physical Characteristics	Unit	Typical Value
Particle Size Distribution		
D50	μm	10
< 20 μm	%	80
< 45 μm	%	99
Specific Surface Area	m^2/g	0.5-2
Loss On Ignition 20°C / 1000°C	%	0.5
Chemical Characteristics	Unit	Typical Value
Al_2O_3	%	99.5
Alpha Alumina Content	%	95~97
Na_2O total	ppm	≤ 2000
CaO	ppm	150
SiO_2	ppm	140
Fe_2O_3	ppm	150

Valid After: 2017/01

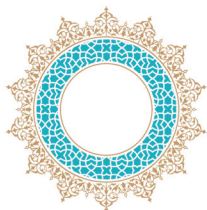
APHTAB, Iran

Tel: +98(21)66907325

Cell: +989125267996

Cell: +989224538003

www.aphtab.com



APHTAB Trade Group

Supplier of aluminum hydroxide

and aluminium oxide (Alumina)

RA101

Reactive Alumina

TECHNICAL DATASHEET

PRODUCT INFORMATION

Reactive aluminum oxide Al_2O_3 , mainly alpha phase, with a Medium soda content.

This grade is used for the production of shaped and unshaped refractories and technical ceramic parts.

CHARACTERISTICS

Physical Characteristics	Unit	Typical Value
Particle Size	MESH	325
Specific Surface Area	m^2/g	2.5
Loss On Ignition 20°C / 1000°C	%	0.5
Chemical Characteristics	Unit	Typical Value
Al_2O_3	%	99.5
Alpha Alumina Content	%	90
Na_2O total	ppm	1800
CaO	ppm	150
SiO_2	ppm	140
Fe_2O_3	ppm	150

Valid After: 2018/12

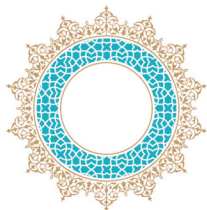
APHTAB, Iran

Tel: +98(21)66907325

Cell: +989125267996

Cell: +989224538003

www.aphtab.com



APHTAB Trade Group

Supplier of aluminum hydroxide

and aluminium oxide (Alumina)

RA121

Reactive Alumina

TECHNICAL DATASHEET

PRODUCT INFORMATION

Reactive aluminum oxide Al_2O_3 , mainly alpha phase, with standard soda content.

This grade is used for the production of shaped and unshaped refractories and technical ceramic parts.

CHARACTERISTICS

Physical Characteristics	Unit	Typical Value
Particle Size	MESH	325
Specific Surface Area	m^2/g	2.5
Loss On Ignition 20°C / 1000°C	%	0.5
Chemical Characteristics	Unit	Typical Value
Al_2O_3	%	99.5
Alpha Alumina Content	%	90
Na_2O total	ppm	3900
CaO	ppm	150
SiO_2	ppm	140
Fe_2O_3	ppm	150

Valid After: 2018/12

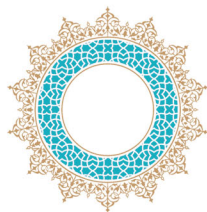
APHTAB, Iran

Tel: +98(21)66907325

Cell: +989125267996

Cell: +989224538003

www.aphtab.com



APHTAB Trade Group

Supplier of aluminum hydroxide

and aluminium oxide (Alumina)

GP100

Soft Calcined Alumina

TECHNICAL DATASHEET

PRODUCT INFORMATION

Soft calcined aluminum oxide Al_2O_3 , with a standard soda content.

This grade is used for aluminum and calcium aluminate production, glaze compounds and blasting process.

CHARACTERISTICS

Physical Characteristics	Unit	Typical Value
Particle Size Distribution		
D50	μm	80
< 120 μm	%	98
Specific Surface Area	m^2/g	45
Loss On Ignition 20°C / 1000°C	%	0.5
Chemical Characteristics	Unit	Typical Value
Al_2O_3	%	99.4
Alpha Alumina Content	%	< 20
Na_2O	ppm	4000
CaO	ppm	150
SiO_2	ppm	140
Fe_2O_3	ppm	80

Valid After: 2017/01

Order No.:

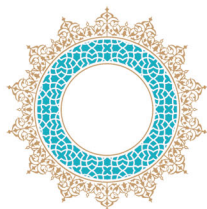
APHTAB, Iran

Tel: +98(21)66907325

Cell: +989125267996

Cell: +989224538003

www.aphtab.com



APHTAB Trade Group

Supplier of aluminum hydroxide

and aluminium oxide (Alumina)

AP101

Calcined Alumina

TECHNICAL DATASHEET

PRODUCT INFORMATION

Calcined aluminum oxide Al_2O_3 , mainly alpha phase, with a standard soda content.

This grade is used for the production of standard bricks, fibers, frits, glaze, and welding fluxes.

CHARACTERISTICS

Physical Characteristics	Unit	Typical Value
Particle Size Distribution	MESH	325
Specific Surface Area	m^2/g	3-4
Loss On Ignition 20°C / 1000°C	%	0.5
Chemical Characteristics	Unit	Typical Value
Al_2O_3	%	99.5
Alpha Alumina Content	%	85~90
Na_2O total	ppm	3500
CaO	ppm	150
SiO_2	ppm	140
Fe_2O_3	ppm	150

Valid After: 2017/01

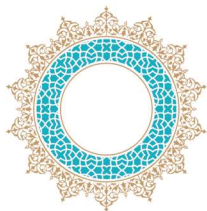
APHTAB, Iran

Tel: +98(21)66907325

Cell: +989125267996

Cell: +989224538003

www.aphtab.com



APHTAB Trade Group

Supplier of aluminum hydroxide

and aluminium oxide (Alumina)

AR106

Fine Calcined Medium Soda Alumina

TECHNICAL DATASHEET

PRODUCT INFORMATION

Fine calcined aluminum oxide Al_2O_3 , mainly alpha phase, with a Medium soda content.

This grade is used for the production of technical parts, refractory cements, standard bricks, fibers, and welding fluxes.

CHARACTERISTICS

Physical Characteristics	Unit	Typical Value
Particle Size Distribution		
D50	μm	2.5
< 30 μm	%	96
< 50 μm	%	99.6
Specific Surface Area	m^2/g	1.8
Loss On Ignition 20°C / 1000°C	%	0.5
Chemical Characteristics	Unit	Typical Value
Al_2O_3	%	99.4
Alpha Alumina Content	%	90
Na_2O total	ppm	1500
CaO	ppm	150
SiO_2	ppm	140
Fe_2O_3	ppm	150

Valid After: 2018/12

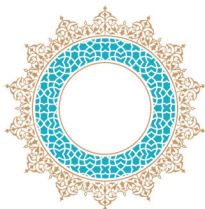
APHTAB, Iran

Tel: +98(21)66907325

Cell: +989125267996

Cell: +989224538003

www.aphtab.com



APHTAB Trade Group

Supplier of aluminum hydroxide

and aluminium oxide (Alumina)

SAS100

Synthesized Alumina-Silica

TECHNICAL DATASHEET

PRODUCT INFORMATION

Synthesized alumina-silica prepared by high purity raw materials.

This grade is used for frits and glaze compounds, tiles, sanitary ware and porcelain tableware body and ceramic fiber blanket/board production.

CHARACTERISTICS

Physical Characteristics	Unit	Typical Value
Particle Size	Mesh	325
Specific Surface Area	m ² /g	3~4
Loss On Ignition 20°C / 1000°C	%	0.3~0.5
Chemical Characteristics	Unit	Typical Value
Al ₂ O ₃	%	45~55
SiO ₂	%	53~43
CaO	%	0.15
Fe ₂ O ₃	%	0.10
Na ₂ O +K ₂ O	%	1.5

Valid After: 2018/12

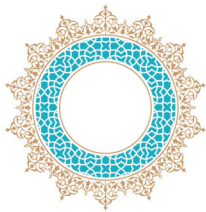
APHTAB, Iran

Tel: +98(21)66907325

Cell: +989125267996

Cell: +989224538003

www.aphtab.com



APHTAB Trade Group

Supplier of aluminum hydroxide

and aluminium oxide (Alumina)

HP100

Hydratable Alumina

TECHNICAL DATASHEET

PRODUCT INFORMATION

Hydratable alumina binder HP100, is an engineered binder for use in no-cement refractory castables. HP100 has been developed for applications where the chemistry of the refractory matrix is critical to product performance. HP100 contains less than 0.1% CaO which reduces the formation of low melting point silicates in the matrix. Such silicates can have a destructive effect on high temperature properties, notably strength (particularly creep) and resistance to slag attack.

CHARACTERISTICS

Appearance	White Powder	
Main crystal phase	ρ Al ₂ O ₃	
Physical Characteristics	Unit	Typical Value
BET Surface Area	m ² /g	270
Bulk Density	g/cm ³	0.7-0.8
Loss On Ignition	%	5-7
Particle Size Distribution		
D50	μm	10
D90	μm	30
Chemical Characteristics	Unit	Typical Value
Al ₂ O ₃	%	≥ 93
Na ₂ O	%	≤ 0.4
CaO	%	≤ 0.1
Fe ₂ O ₃	%	≤ 0.02

Valid After: 2017/01

APHTAB, Iran

Tel: +98(21)66907325

Cell: +989125267996

Cell: +989224538003

www.aphtab.com