

CALCINED BAUXITE

Technical Data Sheet



Tatva Enterprise



Product identifier

CAS Number : 92797-42-7 Substance Name : Bauxite Calcined
 EC Number : 296-578-9 Molecular Formula : $(Al_2O_3 \cdot xH_2O)$

Product Overview

Calcined Bauxite is a type of bauxite that has been calcined (sintered) in rotary, round or shaft kilns. This technique of calcining (heating) bauxite in kilns removes moisture and gives it a lot of alumina, refractoriness, and hardness. Calcined Bauxite is a highly effective raw material in the production of refractory, abrasive, and specialty product applications due to its thermal stability, high mechanical strength and resistance to molten slags.

Our datasheet displays mostly Rotary Klin Calcined Bauxite (RKB), as it is the most widely used type in Refractories. We can offer also Round or Shaft Klin Bauxite on request, and even mixtures of two/three of the above, known as just Calcined Bauxite (CB).

PURE ROTARY KILN BAUXITE												ORIGIN : INDIA	
Item	Unit	Unit	RKB 70		RKB 75		RKB 80		RKB 86		RKB 88		
	Guarantee Value	Typical Unit	Guarantee Value	Typical Unit	Guarantee Value	Typical Unit	Guarantee Value	Typical Unit	Guarantee Value	Typical Unit	Guarantee Value	Typical Unit	
Al ₂ O ₃	% min	%	70.00	70.80	75.00	75.40	80.00	80.30	86.00	86.30	88.00	88.30	
SiO ₂	% max	%	25.00	23.50	19.00	18.30	14.00	13.30	8.00	7.30	6.00	5.50	
Fe ₂ O ₃	% max	%	2.00	1.70	2.00	1.65	2.00	1.60	2.00	1.55	1.60	1.45	
TiO ₂	% max	%	4.00	3.50	4.00	3.50	4.00	3.50	4.00	3.70	4.00	3.50	
CaO+MgO	% max	%	0.80	0.40	0.80	0.55	0.80	0.60	0.70	0.60	0.60	0.50	
K ₂ O+Na ₂ O	% max	%	0.70	0.45	0.70	0.55	0.80	0.50	0.50	0.40	0.50	0.45	
B.D.	g/cc min	g/cc	2.65	2.72	2.80	2.83	2.95	3.00	3.15	3.18	3.25	3.28	
A.P.	% max	%	12.00	10.00	9.00	8.00	8.00	7.00	6.00	5.00	5.00	4.00	
Calcination Temperature	°C		1550.00		1550.00		1550 °C		1560 °C		1580 °C		

PURE SUPER ROTARY KILN BAUXITE CALCINED IN LONG ROTARY KILNS WITH HIGHER BULK DENSITY AND LARGER CRYSTAL SIZE												ORIGIN : INDIA	
Item	Unit	Unit	RKB 75 S		RKB 80 S		RKB 86 S		RKB 88 S		RKB 90 PRIME		
	Guarantee Value	Typical Unit	Guarantee Value	Typical Unit	Guarantee Value	Typical Unit	Guarantee Value	Typical Unit	Guarantee Value	Typical Unit	Guarantee Value	Typical Unit	
Al ₂ O ₃	% min	%	75.00	75.60	80.00	80.50	86.00	86.50	88.00	88.50	90.00	90.80	
SiO ₂	% max	%	19.00	18.00	14.00	13.00	8.00	7.30	6.00	5.00	3.50	3.00	
Fe ₂ O ₃	% max	%	2.00	1.50	2.00	1.55	2.00	1.50	1.60	1.40	1.60	1.20	
TiO ₂	% max	%	4.00	3.30	4.00	3.50	4.00	3.50	4.00	3.80	4.00	3.80	
CaO+MgO	% max	%	0.80	0.40	0.80	0.50	0.70	0.50	0.60	0.35	0.50	0.35	
K ₂ O+Na ₂ O	% max	%	0.70	0.45	0.70	0.45	0.60	0.45	0.50	0.35	0.40	0.25	
B.D.	g/cc min	g/cc	2.80	2.88	2.95	3.03	3.15	3.23	3.30	3.35	3.40	3.45	
A.P.	% max	%	9.00	8.00	8.00	7.00	6.50	4.50	5.00	3.50	4.00	2.50	
W.A.	% max	%	6.00	4.00	5.00	4.00	3.00	2.50	2.50	2.00	2.00	1.50	
T.P.	°C min	°C	1580	1630	1650	1680	1650	1710	1700	1730	1700	1730	
Calcination Temperature	°C		1600 °C		1530 °C		1620 °C		1670 °C		1700 °C		



Many more grades of Bauxite, are available such as 76, 82, 84, 85, 87, 89 and more as per specific requirements. We can also customize the production to lower impurities or improve density.

Applications

Calcined Bauxite is essential for the production of shaped and unshaped refractories for industries such as aluminium production, refractories, abrasives, cement, chemicals, ceramics, non-slip pavement and flooring.

Advantages

- It is resistant to alkali and has good corrosion resistance.
- It can be used as a refractory material for high-temperature furnaces.
- It has good thermal stability and can be used for a long time.
- It is easy to store and transport.

Sizes Available

- 50 - 150mm
- 0-50mm/0-30mm
- 0-1mm, 1-3mm
- 3-5mm, 5-10mm
- Powder : 200mesh/325mesh
- Many other sizes available as per specific

Packing

- 25kg paper/plastic small bags
- 1.0/1.2/1.25/1.35MT Big Bags
- Small bags inside big bags
- Big bags / small bags on pallet
- In bulk

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