



Certificate of Analysis

Sales Order Number: 1059047
Purchase Order Number: 2648

Item Description:
OXIDO DE ALUMINIO|COMMODITY|ALUMINA|CALCINADA|APF|BB-LINER|OW|

Item Number: G6V100765

Lines N°: 1

Shipped Totals:
Total Net Weight: 149.812 KMG
Total Gross Weight: 150.052 KMG
Quantity of Pieces: 120
Total of Packages: 120

Legal Statement

We hereby certify that, unless otherwise indicated, the material covered by this report has been manufactured, inspected, and tested in accordance with, and has been found to meet, the applicable requirements described herein, including any specifications forming a part of the description and that samples representative of the material met the composition. This certification cannot be reproduced in partial form without prior written approval of our Quality Assurance Dept..

Production	Parameter	Result	UOM	Min.	Max.
511711	TiO2	<0.0018	%	0.0	0.004
511711	MnO	<0.0011	%	0.0	0.0035
511711	-44 um	1.3	%	0.0	15.0
511711	Na2O	0.44	%	0.0	0.53
511711	CaO	0.046	%	0.0	0.08
511711	S.A	73.0	m2/g	60.0	90.0
511711	+150um	8.6	%	0.0	15.0
511711	SiO2	0.011	%	0.0	0.035
511711	Fe2O3	0.016	%	0.0	0.034
511711	LOI	0.65	%	0.0	1.5
511711	Al2O3	99.5	%	99.0	100.0
511711	+325#	94.6	%	85.0	100.0
511711	ZnO	0.0024	%	0.0	0.015
511515	S.A	70.0	m2/g	60.0	90.0
511515	+325#	95.5	%	85.0	100.0
511515	LOI	0.60	%	0.0	1.5
511515	ZnO	0.0023	%	0.0	0.015
511515	CaO	0.044	%	0.0	0.08
511515	TiO2	<0.0018	%	0.0	0.004
511515	Al2O3	99.5	%	99.0	100.0
511515	-44 um	4.2	%	0.0	15.0
511515	Fe2O3	0.016	%	0.0	0.034
511515	+150um	8.3	%	0.0	15.0
511515	MnO	<0.0011	%	0.0	0.0035
511515	SiO2	0.011	%	0.0	0.035
511515	Na2O	0.45	%	0.0	0.53



W3M: LAIO-BR-POCOS-CH-RM-FG-INV
Alcoa Alumínio S.A.
Rodovia Poços de Caldas – Andradas, km 10
Poços de Caldas – MG
37719-900

Invoice to Customer:
ZZ GLASS INC
CIUDAD DE PANAMA - EX
Panama

Ship to Customer:
ZZ GLASS INC
CIUDAD DE PANAMA - EX
Panama

Creation Dates: 08 and 09/12/2021
Print Date: 08 and 09/12/2021
Total Quantity Shipped: 150.052 KMG
Date Shipped: 08 and 09/12/2021

Invoices: 239675, 239708, 239709, 239714, 239725, 239726

Delivery IDs: 5714345, 5714380, 5714381, 5714386, 5714396, 5714397

Responsibility:
Business: Leonardo Junqueira / Phone +55 35-2107-5622
Analytical: Renata Pastre Noronha / Phone +55 35-2107-5403
Product Eng.: Diogo Jandoso Souza / Phone +55 35-2107-3178

Shelf Life: 2 years, from the date of production.