

# CERTIFICATE OF ANALYSIS

DATE 06.01.2020  
PRODUCT SODA ASH DENSE  
PURCHASE ORDER NO S-05-2020  
INVOICE NO 1111123501  
QUANTITY 3150 TON

We hereby certify that goods confirm the following specifications:

Production Date: December 2020

ANALYSIS	UNIT	SPECIFICATIONS		ACTUAL RESULTS
		MIN	MAX	
Sodium Carbonate (Na <sub>2</sub> CO <sub>3</sub> )	%	99,30	-	99,60
Chloride (Cl)	%	-	0,12	0,06
Iron (Fe)	ppm(V)	-	15,00	5,00
Sulphate (SO <sub>4</sub> )	ppm(V)	-	270,00	50,00
Loss in weight at 270 C	%	-	0,50	0,18
Density	g/cm <sup>3</sup>	1,00	1,16	1,07
+ 1,180 mm	%	-	1,00	0,40
+ 0,150 mm	%	90,00	-	97,60
- 0,150 mm	%	-	10,00	2,00
L (Whiteness)		-	-	97,88
a (Redness)		-	-	0,25
b (Yellowness)		-	-	1,36
Sodium Chloride (NaCl)	%	-	0,20	0,10
Ferro Oxide (Fe <sub>2</sub> O <sub>3</sub> )	ppm(V)	-	21,50	7,00
Sodium Sulphate (Na <sub>2</sub> SO <sub>4</sub> )	ppm(V)	-	400,00	74,00

NOTES: