



MINERA DE SANTA MARTA, S.A.

## SPECIFICATION

**Product:** NATURAL ANHYDROUS SODIUM SULPHATE

**Type:** Na-G3 (Coarse)

Chemical Formula: **Na<sub>2</sub>SO<sub>4</sub>**      REV.: 8      Belorado Plant      March 2021

Parameter		Standard Product	Limit	Test/Method
1	Appearance	Coarse quality product free from foreign materials		Visual inspection
2	Na <sub>2</sub> SO <sub>4</sub>	99.80 %	99.50 % minimum	IT01
3	Moisture content	0.03 %	0.05 % maximum	IT02
4	Chloride (Cl <sup>-</sup> )	0.05 %	0.18 % maximum	IT03
5	Calcium (Ca <sup>2+</sup> )	0.01 %	0.03 % maximum	IT04
6	Magnesium (Mg <sup>2+</sup> )	0.01 %	0.03 % maximum	IT04
7	Acid insoluble	0.005 %	0.01 % maximum	IT05
8	pH (1%)	7.00	± 1.00	IT06
9	Bulk density	1500 kg/m <sup>3</sup>	± 150	IT07
10	Colour (CIE)	L*	96	92 minimum
		a*	0	± 0,5
		b*	2,5	± 2,5
<b>TRACE METALS</b>				
11	Iron (Fe)	1 ppm	3 ppm maximum	IT09
	Chromium (Cr)	<1 ppm	2 ppm maximum	
<b>PARTICLE SIZE DISTRIBUTION</b>				
12	Above 1000 µm	0 %		IT10
	Above 315 µm	50 % maximum		
	Between 100 and 315 µm	45 % minimum		
	Below 100 µm	10 % maximum		
	Mean size	300 ± 50 microns		

Issued by Quality Coordinator

Approved by Commercial Director