



MINERA DE SANTA MARTA, S.A.

SPECIFICATION

Product:	NATURAL ANHYDROUS SODIUM SULPHATE
Type:	Na-G3 (Coarse)

Chemical Formula: Na₂SO₄	REV.: 6	Belorado Plant	October 2015
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Parameter	Standard Product	Limit	Test/Method
1 Appearance	Coarse quality product free from foreign materials		Visual inspection
2 Na ₂ SO ₄	99.80 %	99.50 % minimum	IT01
3 Moisture content	0.02 %	0.05 % maximum	IT02
4 Chloride (Cl ⁻)	0.06 %	0.18 % maximum	IT03
5 Calcium (Ca ²⁺)	0.01 %	0.03 % maximum	IT04
6 Magnesium (Mg ²⁺)	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 ³	± 150	IT07
10 Colour (CIE)	L*	96	IT08
	a*	0	
	b*	2,5	
TRACE METALS			
11 Iron (Fe)	1 ppm	3 ppm maximum	IT09
Chromium (Cr)	<1 ppm	2 ppm maximum	
PARTICLE SIZE DISTRIBUTION			
12	Above 1000 µm	0 %	IT10
	Above 315 µm	45 % maximum	
	Between 100 and 315 µm	50 % minimum	
	Below 100 µm	10 % maximum	
	Mean size	300 ± 50 microns	

Issued by Quality Coordinator

Approved by Commercial Director