



MINERA DE SANTA MARTA, S.A.

## SPECIFICATION

<b>Product:</b>		<b>NATURAL ANHYDROUS SODIUM SULPHATE</b>		
<b>Type:</b>		<b>Na-G3.ED2 (Coarse)</b>		
<b>Chemical Formula:</b>		<b>Na<sub>2</sub>SO<sub>4</sub></b>	REV.: 1	Belorado Plant
				September 2015
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> )	0.06 %	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	1425 kg/m <sup>3</sup>	± 100	IT07
10	Colour (CIE)	L*	96	92 minimum
		a*	0	± 0,5
		b*	2,5	± 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 300 µm		0.5 % maximum	IT23
	Above 250 µm		8.5 % maximum	
	Between 150 and 250 µm		89 % minimum	
	Below 150 µm		2.5 % maximum	
	Below 100 µm		0.5 % maximum	

**Issued by Quality Coordinator**

**Approved by Commercial Director**