



MINERA DE SANTA MARTA, S.A.

SPECIFICATION

Product :		NATURAL ANHYDROUS SODIUM SULPHATE		
Type :		Na – N Standard		
Chemical Formula: Na ₂ SO ₄		REV. : 4	MSM	Mai 2022
Parameter		Typical value	Limit	Test/Method
1	Appearance	Flowing powder free from foreign materials		Visual inspection
2	Na ₂ SO ₄	99.50-99.80 %	99.00 % minimum	IT01
3	Moisture content	0.02 %	0.05 % maximum	IT02
4	Chloride (Cl ⁻)	0.01-0.06 %	0.18 % maximum	IT03
5	Calcium (Ca ²⁺)	0.01-0.10 %	0.03 % maximum	IT04
6	Magnesium (Mg ²⁺)	0.00-0.01 %	0.03 % maximum	IT04
7	Acid insoluble	0.005-0.010 %	0.030 % maximum	IT05
8	pH (1%)	7.00	± 1.00	IT06
9	Bulk density	1435-1525 kg/m ³	± 75	IT07
10	L *	95-97	92 minimum	IT08
	a *	0.0	± 0.5	
	b *	2.5	± 2.5	
TRACE METALS				
11	Iron (Fe)	<2 ppm	5 ppm maximum	IT09
	Chromium (Cr)	<1 ppm	2 ppm maximum	
PARTICLE SIZE DISTRIBUTION				
12	Above 1000 µm	1 % maximum		IT10
	Above 315 µm	40 % maximum		
	Between 100 and 315	45 % minimum		
	Below 100 µm	35 % maximum		
	Mean size	240 ± 60 microns		

Issued by Quality Coordinator

Approved by Commercial Director