



MINERA DE SANTA MARTA, S.A.

## SPECIFICATION

**Product :** **S-98**

REV.: 2

Villarrubia Plant

December 2016

| Parameter                         | Standard product                           | Limit             | Test/Method       |
|-----------------------------------|--|-------------------|-------------------|
| 1 Appearance                      | Flowing powder free from foreign materials |                   | Visual inspection |
| 2 NaCl                            | 98,00 %                                    | 97,00 – 99,90 %   | IT03              |
| 3 Na <sub>2</sub> SO <sub>4</sub> | 1,75 %                                     | 3,00 % maximum    | IT01              |
| 4 Moisture content                | 0,10 %                                     | 0,25 % maximum    | IT02              |
| 5 Calcium (Ca <sup>2+</sup> )     | 0,02 %                                     | 0,05 % maximum    | IT04              |
| 6 Magnesium (Mg <sup>2+</sup> )   | 0,00 %                                     | 0,02 % maximum    | IT04              |
| 7 Acid insoluble                  | 0,05 %                                     | 0,10 % maximum    | IT05              |
| 8 pH (1%)                         | 7,00                                       | ± 1,50            | IT06              |
| 9 Bulk density                    | 1200 kg/m <sup>3</sup>                     | ± 100             | IT07              |
|                                   | L*   | 90                | 85 minimum        |
| 10 Color (CIE)                    | a*   | 1,0               | ± 1,5             |
|                                   | b*   | 9,5               | ± 2,5             |
| <b>PARTICLE SIZE DISTRIBUTION</b> |  |                   |                   |
|                                   | Above 1000 µm                              | 15% maximum       |                   |
|                                   | Above 500 µm                               | 75 % maximum      |                   |
| 12                                | Above 250 µm                               | 65 % minimum      | IT10              |
|                                   | Below 100 µm                               | 3 % maximum       |                   |
|                                   | Mean size                                  | 500 ± 150 microns |                   |

Issued by Quality Coordinator

Approved by Commercial Director