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| **^)manico?** | **PRODUCT SPECIFICATION COPPER SULPHATE PENTAHYDRATE “SNOW HIGH PURITY BIO GRADE”** | Prepared by: R. Rosà | **SP-066.03en** |
| Verified by:  W. Chiasera | *Page* **1** of 1 |
| Approved by: P.Manica | Rev Data emissione  3 07/10/15 |

PRODUCT: **COPPER SULPHATE PENTAHYDRATE**

**“Snow High Purity BIO GRADE” microcrystals.**

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| MANUFACTURER: | **MANICA S.p.A.**  **Via all' Adige,4 38068 ROVERETO (Trento) - Italy tel. +39 0464 433705 fax +39 0464 437224**  **E-mail: [info@manica.com](mailto:info@manica.com)**  **Web site: [www.manica.com](http://www.manica.com/)** |

PHYSICAL AND CHEMICAL PROPERTIES

Chemical formula: CuSO4 ⋅ 5H2O Melting point : decomposes over 560°C

Molecular weight: 249.68 Apparent density: about 1.2 g/cm3

Odour: odourless Solubility in water: 266 g/l a 20°C

**PHYSICAL AND CHEMICAL SPECIFICATION**

Only the parameters present in this section (physical and chemical specification) will be insert in the certificate of analysis

|  |  |  |  |
| --- | --- | --- | --- |
| Specification | Method | Typical value | Limit value |
| **Aspect** | Sensorial | Light blue microcrystals | |
| **Purity (%)** | MA-001(o MA-002) | 100 - 101.5 | min. 99.9 |
| **Cu content (%)** | MA-001(o MA-002) | 25,5 - 25,8 | min. 25.43 |
| **pH (5% water solution 5%)** | MA-003 |  | 3.7 – 4.2 |
| **Insoluble matter (%)** | MA-004 | < 0.01 | max. 0.02 % |
| ***Main Impurities:* Fe (ppm)** | MA-006 | 10 - 15 | max 25 |
| **Pb (ppm)** | MA-006 | < 5 | max 10 |
| **Ni (ppm)** | MA-006 | 1 - 2 | max 3 |
| **Cd (ppm)** | MA-006 | < 1 | max 1.5 |
| **Zn (ppm)** | MA-006 | 2 - 4 | max 6 |
| **As (ppm)** | MA-008 | < 1 | max 1.5 |
| **Cl (ppm)** | MA-006 | 1 - 3 | max 5 |

OTHER INFORMATION

□ *CRYSTAL SIZE* (this data are only indicative and may be subjected to variation without any notice)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Crystals size (µm) | > 1000 | 1000 - 500 | 500 - 400 | 400 - 300 | 300 - 200 | 200 - 100 | < 100 |
| *Weight %* | trace | 0 – 10 | 5 – 15 | 15 – 30 | 25 – 35 | 20 – 30 | 8 - 15 |

□ *PACKAGING AVAILABLE*

- polypropylene bags of 25 Kgs (net weight)

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