



Lte: 907/1113

## CERTIFICATE OF ANALYSIS

Product **MINOXIDIL-USP/EP current edition**

Code N° **2610290**

Batch N° **1340552**

Manufacturing date **Jul 2013**

Retesting date  
(where applicable)

**Jun 2018**

Expiration date  
(where applicable)

| Analysis Number                           | N4PF070901                     |        | Limits                     |           |
|-------------------------------------------|--------------------------------|--------|----------------------------|-----------|
| Test                                      | Results                        | M.U.   | Min                        | Max       |
| Description                               | White, crystalline powder      |        | White, crystalline powder  | Off-white |
| Identification                            |                                |        |                            |           |
| - IR                                      | Conforms to Standard           |        | Conforms to Standard       |           |
| - UV                                      | Conforms                       |        | Conforms                   |           |
| Loss on drying                            | 0,1                            | %      |                            | 0,5       |
| Residue on ignition                       | 0,0                            | %      |                            | 0,1       |
| Heavy metals                              | < 20                           | ppm    |                            | 20        |
| Appearance of Solution                    | Not more coloured than Y-6     |        | Not more coloured than Y-6 |           |
| Assay (perchloric acid)                   | 98,8                           | %dried | 98,5                       | 101,0     |
| Assay HPLC                                | 99,1                           | %dried | 97,0                       | 103,0     |
| Related Substances HPLC                   |                                |        |                            |           |
| - 2,4-Diamino-6-Chloro-Pyrimidine         | < 0,05                         | %      |                            | 0,2       |
| - 2,4-Diamino-6-Chloro-Pyrimidine-3-Oxide | < 0,05                         | %      |                            | 0,2       |
| - 2,4-Diamino-6-Piperidinopyrimidine      | < 0,05                         | %      |                            | 0,2       |
| - Large; unknown Impurity                 | < 0,05                         | %      |                            | 0,10      |
| - Total Impurities                        | 0,4                            | %      |                            | 1,5       |
| OVI (USP) : Not used                      |                                |        | Not tested                 |           |
| Residual Solvents (GC) :                  |                                |        |                            |           |
| - ICH Class 1 Solvents: Not used          |                                |        | Not tested                 |           |
| - ICH Class 1 Solvents: Not used          |                                |        | Not tested                 |           |
| - ICH Class 3 Solvents:                   |                                |        |                            |           |
| - 2-propanol                              | 453                            | ppm    | < 24 (LOQ)                 | 2000      |
| - Acetone                                 | 13                             | ppm    | < 12 (LOQ)                 | 1000      |
| Packaging and Storage                     | Preserve well-closed container |        |                            |           |

This batch has been manufactured, packaged and tested in accordance with EU GMP Guideline Volume 4 Part II (ICH Q7A).  
Manufacturing site of the Active Pharmaceutical Ingredient : OLON S.P.A. - GARBAGNATE MIL.se

Date

July 18, 2013

*B.C. Manager (Roberto Quaglia)*

Reviewed by Qualified Person