

1702000425

**sicor**

**TEVA** API Division

| PRODUCT SPECIFICATIONS AND CERTIFICATE OF ANALYSIS                                                                                                                            |                                                                                                                                                                                                 |                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
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| <b>Product Name:</b> Levodopa                                                                                                                                                 |                                                                                                                                                                                                 |                                        |
| <b>Control No.:</b> 03004503616                                                                                                                                               | <b>Order No.:</b> SU60329002                                                                                                                                                                    |                                        |
| <b>Customer Name:</b> LABORATORIO CHILE S.A.                                                                                                                                  |                                                                                                                                                                                                 | <b>Client Packing Order:</b> PO 220741 |
| <b>Quantity:</b> 315.000 KG                                                                                                                                                   | <b>Quality Market:</b> EUR                                                                                                                                                                      |                                        |
| <b>Manufacturing Site:</b> Bulciago                                                                                                                                           | <b>Original Analysis Date:</b> 22-July-2016                                                                                                                                                     |                                        |
| <b>Manufacturing Date:</b> July 2016                                                                                                                                          | <b>Re Test date:</b> July 2021                                                                                                                                                                  |                                        |
| <b>Packaging and storage:</b> Preserve in tight, light -resistant containers, store in a dry place, and prevent exposure to excessive heat, excursions permitted up to 30 °C. |                                                                                                                                                                                                 |                                        |
| <b>TESTS AND METHODS</b>                                                                                                                                                      | <b>SPECIFICATIONS</b>                                                                                                                                                                           | <b>RESULTS*</b>                        |
| <b>Ph.Eur TESTS</b>                                                                                                                                                           |                                                                                                                                                                                                 |                                        |
| <b>Description</b>                                                                                                                                                            | white or almost white crystalline powder                                                                                                                                                        | Conforms                               |
| <b>Solubility</b>                                                                                                                                                             | slightly soluble in water, practically insoluble in ethanol (96 per cent). It is freely soluble in 1 M hydrochloric acid and sparingly soluble in 0.1 M hydrochloric acid                       | Conforms                               |
| <b>Identification (by IR)</b>                                                                                                                                                 | the infrared absorption spectrum of the preparation of the test specimen exhibits maxima only at the same wavelengths as that of a similar preparation of the corresponding reference standard. | Conforms                               |
| <b>Appearance of Solution</b>                                                                                                                                                 | not more coloured than BY6                                                                                                                                                                      | less than BY6                          |
| <b>pH</b>                                                                                                                                                                     | 4.5 to 7.0                                                                                                                                                                                      | 5.0                                    |
| <b>Related Substances (by HPLC) EP</b>                                                                                                                                        |                                                                                                                                                                                                 |                                        |
| impurity A                                                                                                                                                                    | not more than 0.1%                                                                                                                                                                              | Less than 0.03%                        |
| impurity B                                                                                                                                                                    | not more than 0.5%                                                                                                                                                                              | 0.15%                                  |
| impurity C                                                                                                                                                                    | not more than 0.2%                                                                                                                                                                              | Less than 0.03%                        |
| unspecified impurity                                                                                                                                                          | not more than 0.05%                                                                                                                                                                             | Less than 0.03%                        |
| total impurities                                                                                                                                                              | not more than 1.0%                                                                                                                                                                              | 0.15%                                  |
| <b>Enantiomeric purity</b>                                                                                                                                                    | not more than 0.5%                                                                                                                                                                              | Less than 0.05%                        |
| <b>Heavy Metals</b>                                                                                                                                                           | not more than 10 ppm                                                                                                                                                                            | Less than 10ppm                        |
| <b>Loss on Drying</b>                                                                                                                                                         | not more than 1.0%                                                                                                                                                                              | 0.26%                                  |

Sicor Societa' Italiana Corticosteroidi S.r.l  
Via Messina 38, 20154 Milan Italy

Manufacturing site : Via Briantea km 36 n. 83, 23892, Bulciago (LC) Italy TEL. 031872.1 FAX. 031872351



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**PRODUCT  
SPECIFICATIONS  
AND  
CERTIFICATE OF ANALYSIS**

|                                                                                                                                                                               |                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| <b>Product Name:</b> Levodopa                                                                                                                                                 | <b>Order No.:</b> SU60329002                |
| <b>Control No.:</b> 03004503616                                                                                                                                               | <b>Client Packing Order:</b> PO 220741      |
| <b>Customer Name:</b> LABORATORIO CHILE S.A.                                                                                                                                  |                                             |
| <b>Quantity:</b> 315.000 KG                                                                                                                                                   | <b>Quality Market:</b> EUR                  |
| <b>Manufacturing Site:</b> Bulciago                                                                                                                                           | <b>Original Analysis Date:</b> 22-July-2016 |
| <b>Manufacturing Date:</b> July 2016                                                                                                                                          | <b>Re Test date:</b> July 2021              |
| <b>Packaging and storage:</b> Preserve in tight, light -resistant containers, store in a dry place, and prevent exposure to excessive heat, excursions permitted up to 30 °C. |                                             |

| TESTS AND METHODS                          | SPECIFICATIONS           | RESULTS* |
|--------------------------------------------|--------------------------|----------|
| Ph.Eur TESTS                               |                          |          |
| Sulphated Ash                              | not more than 0.1%       | 0.03%    |
| Assay (on the dried basis)                 | 99.0 to 101.0 %          | 99.5%    |
| Residual Solvents In House TESTS           |                          |          |
| Residual Solvents<br>Acetone               | not more than 300 ppm    | 39ppm    |
| Physical TESTS                             |                          |          |
| Bulk Density<br>Ir-House                   | between 0.4 and 0.6 g/ml | 0.6g/ml  |
| Tapped bulk density<br>Ir-House            | between 0.7 and 1.0 g/ml | 1.0g/ml  |
| Particle size (Alpine air jet)<br>Ir-House |                          |          |
| passed through 63µ sieve                   | between 30 and 94%       | 50%      |
| passed through 125µ sieve                  | between 57 and 100%      | 90%      |

**Remarks:**

1. Conforms to the requirements of the Ph.Eur and Residual Solvents In House and Physical Specifications.
2. Product according to current EU Pharmacopeia
3. None of Class I solvent are used to manufacture the product

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| <b>PRODUCT<br/>SPECIFICATIONS<br/>AND<br/>CERTIFICATE OF ANALYSIS</b>                                                                                                         |                                                                      |
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| <b>Control No.:</b> 03004503616                                                                                                                                               | <b>Order No.:</b> SU60329002                                         |
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| <b>Packaging and storage:</b> Preserve in tight, light -resistant containers, store in a dry place, and prevent exposure to excessive heat, excursions permitted up to 30 °C. |                                                                      |
| <b>Released by Quality Control Manager:</b><br><br><b>Pierangelo Colombo</b>                                                                                                  | <b>Signature**:</b> Pierangelo Colombo      3 February 2017 18.13.02 |
|                                                                                                                                                                               | <b>Print Date:</b> 3 February 2017                                   |
|                                                                                                                                                                               | <b>QA Approval:</b> Sergio Fracchia                                  |
|                                                                                                                                                                               |                                                                      |

(\*) Upon completion of the 'Results' column this document becomes a certificate of analysis      **End of C.O.A.**

(\*\*) This document was signed electronically and this is the manifestation of the electronic signature.

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