

Quiminter, S.A.

APARTADO POSTAL 0819-09930 EL DORADO - PANAMÁ - REP DE PANAMÁ TEL.: (00-507) 263-3272 - FAX: (00-507) 269-1342



### CERTIFICATE OF ANALYSIS

Material: PROPIN OXIFENIL MANDELATO  
DE DIMETIL AMINO ETANO CLORHIDRATO

Lot No: E-65005  
Code No: 72455  
Lab No: QC-40514

Tested according to: Deimar

| TEST                              | SPECIFICATIONS                                                                                                                                                                  | RESULTS     |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Description                       | White to creamy white powder                                                                                                                                                    | Conforms    |
| Foreign material                  | Essentially free of foreign material                                                                                                                                            | Conforms    |
| Solubility                        | Soluble in water, alcohol, chloroform and diluted acids;<br>sparingly soluble in acetone; practically insoluble in toluene,<br>ether, ethyl acetate, hexane and diluted alkalis | Conforms    |
| Identification (IR)               | IR spectrum conforms to that of the reference standard                                                                                                                          | Conforms    |
| Identification<br>(precipitation) | A white precipitate is obtained from sample solution combined<br>with AgNO <sub>3</sub> TS                                                                                      | Conforms    |
| Melting range                     | 167 - 172°C                                                                                                                                                                     | 169-172     |
| Water content (KF)                | ≤ 1.0% w/w                                                                                                                                                                      | 0.2         |
| Residue on ignition               | ≤ 0.1% w/w                                                                                                                                                                      | 0.1         |
| Loss on drying                    | ≤ 1.0% w/w                                                                                                                                                                      | N. Detected |
| Sulphate                          | ≤ 100 ppm                                                                                                                                                                       | < 100       |
| Heavy metals                      | ≤ 20 ppm                                                                                                                                                                        | < 20        |
| pH                                | 3.6 - 4.2                                                                                                                                                                       | 3.8         |
| Colour of solution                | Less than analytical method standard (C)                                                                                                                                        | Conforms    |
| Assay (titration)                 | 98.0 - 102.0% w/w on dried basis                                                                                                                                                | 100.5       |

Disposition: Meets specifications

Manufacturing date: February 19<sup>th</sup>, 2016 ✓ Retest date: February 18<sup>th</sup>, 2021 ✓

por: *Geoffrey B. B.*

Date: February 24<sup>th</sup>, 2016

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