

## Analytical Data Sheet

Lot number **1000027790**  
not for drug use

Catalog number **E-3665.0250**  
Product number **4041045.0250**  
Product **H- His(1- Me) - OH**  
Molecular formula **C<sub>7</sub>H<sub>11</sub>N<sub>3</sub>O<sub>2</sub>**  
Relative molecular mass **169.18**

| Tests                               | Results   |        |       |            |            |           |           |            |            |
|-------------------------------------|---|--------|-------|------------|------------|-----------|-----------|------------|------------|
| Appearance                          | white powder  |        |       |            |            |           |           |            |            |
| Appearance of solution              | clear, light yellow solution (50 mg/ml in AcOH)   |        |       |            |            |           |           |            |            |
| Identification (elemental analysis) | <table> <thead> <tr> <th>Theory</th> <th>Found</th> </tr> </thead> <tbody> <tr> <td>C = 48.3 %</td> <td>C = 48.3 %</td> </tr> <tr> <td>H = 6.7 %</td> <td>H = 6.8 %</td> </tr> <tr> <td>N = 24.1 %</td> <td>N = 24.0 %</td> </tr> </tbody> </table> <p>calc. as x 0.28 H<sub>2</sub>O (2.9 %)</p> | Theory | Found | C = 48.3 % | C = 48.3 % | H = 6.7 % | H = 6.8 % | N = 24.1 % | N = 24.0 % |
| Theory                              | Found   |        |       |            |            |           |           |            |            |
| C = 48.3 %                          | C = 48.3 %  |        |       |            |            |           |           |            |            |
| H = 6.7 %                           | H = 6.8 %   |        |       |            |            |           |           |            |            |
| N = 24.1 %                          | N = 24.0 %  |        |       |            |            |           |           |            |            |
| Identification (TLC)                | conforms with authentic material  |        |       |            |            |           |           |            |            |
| Specific optical rotation           | $[\alpha]_D^{24} = +14.6^\circ$ (1.9 % HCl 1N)  |        |       |            |            |           |           |            |            |
| Purity (TLC)                        | > 99%   |        |       |            |            |           |           |            |            |
| TLC conditions                      | n-butanol/acetic acid/H <sub>2</sub> O 4/2/2<br>methanol/chloroform/ammonia 17% 2/2/1<br>isopropanol/ammonia conc. 1/1<br>plate: silicagel 60 F <sub>254</sub><br>detected by: UV, ninhydrin, chlorine-tolidine   |        |       |            |            |           |           |            |            |
| Assay (elemental analysis)          | 96.7% (Nth 24.84, Nfd 24.02 %)  |        |       |            |            |           |           |            |            |
| Assay (titration)                   | 97.1% (HClO <sub>4</sub> )  |        |       |            |            |           |           |            |            |

Latest update: January 29, 2020

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