

## **CERTIFICATE OF ANALYSIS**

Product : 2-NITROPHENYL-B-D-GALACTOPYRANOSIDE

(ONPG)

Product number : O1409
Batch number : 011220
Date of analysis : 03-12-2014
Date of expiry : 31-12-2019

Packaging and storage : keep containers tightly closed, store dry at 2-8 °C

| Description                                     | SPECIFICATION white to pale yellow powder | RESULT white powder | UNITS | REMARKS                       |
|---|---|---------------------|-------|-------------------------------|
| Solution test                                   | clear and colourless                      | complies            |       | 1% in H <sub>2</sub> O        |
| Purity:<br>n-butanol\acetic acid\water<br>3:1:1 | single spot (> 99%)                       | > 99%               |       | TLC, 254 nm<br>silica gel 60A |
| Water   | < 0.5                                     | 0.09                | %     | Karl Fischer                  |
| 2-Nitrophenol (ONP)                             | < 100                                     | < 60                | ppm   | TLC                           |
| IR-spectrum                                     | conform                                   | complies            |       |                               |
| Specific optical rotation ( $[\alpha]_D^{20}$ ) | -6771                                     | -69.1               | 0     | 1% in H <sub>2</sub> O        |

This certificate of analysis is conform the results of the manufacturer.

Conclusion: approved

Released by: drs. M. van Wissen, pharmacist

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Date: 28-04-2015

The buyer is responsible to test each batch to ensure the product is suitable for their specific purpose.

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