



## **CERTIFICATE OF ANALYSIS**

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by Intertek. Certificate

Number. 2317548

| Catalogue Number | 16619    |
|------------------|----------|
| Lot Number       | A0442495 |

Description 4-Piperidone monohydrate hydrochloride,98%

CAS Number 40064-34-4
Quality Test/Release Date 25/Nov/2024
Suggested retest date 25/Nov/2029
Country of Origin INDIA
Declaration of Origin synthetic

| Result Name          | Units | Specifications                     | Test Value                    |
|----------------------|-------|------------------------------------|-------------------------------|
| Appearance (Color)   |       | Off-white to yellow to light beige | light yellow                  |
| Appearance (Form)    |       | Crystalline powder                 | Crystalline powder            |
| Infrared spectrum    |       | Conforms                           | Conforms                      |
| Melting point        |       | 89°C to 99°C                       | 95°C                          |
| Titration with HClO4 | %     | >=97.5 (On anhydrous substance)    | 99.6 (On anhydrous substance) |
| TLC                  | %     | >=97.5                             | >=97.5                        |
| Water                | %     | 10.5 to 13                         | 11.3                          |

Geert Torfs Supervisor, QC

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.