

Avocado Research Chemicals (Thermo Fisher Scientific) Shore Road, Port of Heysham Industrial Park Heysham, LA3 2XY, United Kingdom

CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by LRQA. Certificate Number. 10551915

| Catalogue Number | A12107 |
|------------------|----------|
| Lot Number | 10239635 |

Description N,N,N',N'-Tetramethyl-p-phenylenediamine dihydrochloride, 98+%

CAS Number 637-01-4
Quality Test/Release Date 24/Jun/2025
Suggested retest date 24/Jun/2030
Country of Origin China
Declaration of Origin Synthetic

| Result Name | Units | Specifications | Test Value |
|-------------------------------|-------|--|------------|
| Assay (Titration ex Chloride) | % | ≥98.0 to ≤102.0% (non-U.S. Specification) | 99.3 |
| Assay (Freebase GC) | % | ≥98.0% (non-U.S. Specification) | 99.7 |
| Appearance (Color) | | White to cream to yellow or grey of pale brown | Pale brown |
| Form | | Crystals or powder or crystalline powder | Powder |
| Identification (FTIR) | | Conforms | Conforms |

Paul Coleman Site Quality Manager

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.