



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 12462 Lot Number A0471319

Description Hydrochloric acid, pure, fuming, 37% solution in water

CAS Number 7647-01-0
Quality Test/Release Date 25/Mar/2025
Suggested retest date 25/Mar/2028
Country of Origin GERMANY
Declaration of Origin synthetic

BSE/TSE

Not directly derived from or manufactured with any animal byproducts in any way

(Including but not limited to fermentation or nutrient broth, catalysts, enzymes).

| Result Name | Units | Specifications | Test Value | |
|---------------------|-------|----------------|----------------|--|
| Appearance (Form) | | Clear solution | Clear solution | |
| Color scale | APHA | =<10 | 10 | |
| Titration with NaOH | % | 35.0 to 39.0 | 36.6 | |
| Free chlorine | ppm | =<10 (CI) | =<4 (CI) | |
| Lead (Pb) | ppm | =<2 | =<0.1 | |
| Iron (Fe) | ppm | =<5 | =<0.5 | |
| Sulfate (SO4) | ppm | =<100 | =<100 | |

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.