

CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by Intertek Global Certificate Number. CERT-0120633

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|---------------------------|--|
| Catalogue Number | LS118 |
| Lot Number | 256686 |
| Description | WATER WITH 0.1% (V/V) FORMIC ACID, OPTIMA-LCMS GRADE |
| CAS Number | 64-18-6,7732-18-5 |
| Quality Test/Release Date | 31/Mar/2026 |
| Suggested retest date | 30/Mar/2031 |
| Country of Origin | United States |
| Declaration of Origin | Organic - non animal |

| Result Name | Units | Specifications | Test Value |
|---|----------------------|---------------------------------|------------------------|
| APPEARANCE | | REPORT | Clear Colorless Liquid |
| ASSAY (V/V) FORMIC ACID | % | Inclusive Between 0.095 - 0.105 | 0.102 |
| COLOR | APHA | <= 10 | <5 |
| EVAPORATION RESIDUE | ppm | <= 1 | <1 |
| IDENTIFICATION | PASS/FAIL | = PASS TEST | PASS TEST |
| IONIC IMPURITY - ALUMINUM (Al) | ppb | <= 20 | <1 |
| IONIC IMPURITY - CALCIUM (Ca) | ppb | <= 50 | 4 |
| IONIC IMPURITY - COPPER (Cu) | ppb | <= 10 | <1 |
| IONIC IMPURITY - IRON (Fe) | ppb | <= 10 | <1 |
| IONIC IMPURITY - LEAD (Pb) | ppb | <= 10 | <1 |
| IONIC IMPURITY - MAGNESIUM (Mg) | ppb | <= 10 | 1 |
| IONIC IMPURITY - MANGANESE (Mn) | ppb | <= 10 | <1 |
| IONIC IMPURITY - NICKEL (Ni) | ppb | <= 10 | <1 |
| IONIC IMPURITY - POTASSIUM (K) | ppb | <= 20 | 2 |
| IONIC IMPURITY - SILVER (Ag) | ppb | <= 10 | <1 |
| IONIC IMPURITY - SODIUM (Na) | ppb | <= 50 | 6 |
| IONIC IMPURITY - ZINC (Zn) | ppb | <= 20 | 2 |
| LC GRADIENT TEST WITH PDA (200-400 NM) | mAU | <= 2 | <2 |
| LCMS SUITABILITY - POS. MODE (AS PROPAZINE) | ppb | <= 50 | <50 |
| OPTICAL ABS AT 210 NM | ABS. UNITS | <= 1.25 | 1.20 |
| OPTICAL ABS AT 220 NM | ABS. UNITS | <= 0.85 | 0.80 |
| OPTICAL ABS AT 230 NM | ABS. UNITS | <= 0.55 | 0.34 |
| OPTICAL ABS AT 254 NM | ABS. UNITS | <= 0.01 | <0.01 |
| PROTEASE | DETECTED/NOT DETECT. | = NOT DETECTED | NOT DETECTED |



Harout Sahagian
QC 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 use or further manufacturing. 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.

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.