

CERTIFICATE OF ANALYSIS

PRODUCT NAME: HEPES N-(2-Hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid)

CAS NO. 7365-45-9

FORMULA: $C_8H_{18}N_2O_4S$

BATCH NO. 17/MFM/2028

CAS Number: 7365-45-9

EXP. DATE: May 2020

| TESTS | SPECS | RESULTS |
|------------------------------|---------------------------------------|----------|
| Description | White Crystalline Free-Flowing Powder | Complies |
| Water Content (By KF) | ≤0.5% | 0.28 |
| pH 1% Di H ₂ O | 4.8 – 5.6 (25°C) | 5.2 |
| Solubility 1M water | Clear, colourless solution | Complies |
| Loss on Drying (105°C, 4Hr) | ≤0.5% | 0.47 |
| Residue on Ignition | ≤0.1% | Complies |
| Heavy Metals (Pb) | ≤5ppm | Complies |
| Assay (Titration, Dry Basis) | ≥99.5% | 99.6 |
| pKa at 20°C | 7.35 – 7.69 | 7.50 |
| Infrared | Complies | Complies |
| A ₂₆₀ , 1M water | ≤0.045 | 0.040 |
| A ₂₈₀ , 1M water | ≤0.035 | 0.022 |
| A ₄₂₀ , 1M water | ≤0.020 | 0.016 |

* This material is supplied for laboratory use only.

Supplier: Formedium Ltd

Approved by:


 For and on behalf of
 FORMEDIUM Ltd, Unit 1B
 Hunstanton Commercial Park
 PE36 5JQ England
 Date: 21 NOV 2017
 (Authorised Signature)