

Certificate of Analysis

Date of Testing: 2023-12-29 09:15:06

Date of Next Testing: 2027-12-28 09:15:06

Product Name: **HEPPS**

CAS Number: 16052-06-5

Specifications & Purity: $\geq 99.5\%$ (T)

Lot #: L2327106

SKU #: **H110900**Analysis: **305635**

| Parameter | Limit Values | Result |
|--|---------------------------------------|---------------------------------------|
| Heavy metal (as Pb) | 0-5 (ppm) | 0.00 ppm |
| UV Absorbance 290nm(33%,H ₂ O) | 0-0.1 | 0.07 |
| Ammonia (NH ₃) | 0-0.1 (%) | 0.03 % |
| Purity (Titration by NaOH)(anhydrous) | 99.5-100.5 (%) | 100.40 % |
| Water by Karl Fischer | 0-0.1 (%) | 0.04 % |
| Appearance (H110900) | white to off-white crystalline powder | white to off-white crystalline powder |
| Infrared spectrum | Conforms to Structure | Conforms to Structure |
| Proton NMR spectrum | Conforms to Structure | Conforms to Structure |
| Solubility in H ₂ O , Colorless to Light Yellow Clear25g/50 ml | pass | Pass |

John Su
QA & QC Manager