



CERTIFICATE OF ANALYSIS

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|---------------------|--|
| Product Name | 2,2'-Bis(hydroxymethyl)butyric acid (DMBA) |
| Cas no | 10097-02-6 |
| Batch Number | 20230329 |
| Packing | In 25kgs net bag |
| Date Of Manufacture | March 29 2023 |
| Date Of Reported | March 29 2023 |

This is to certify that the quality of the subject product is as follows:

| Items | Specifications | Results |
|--|----------------|---------------|
| Appearance | White crystal | White crystal |
| Assay | 99%min | 99.64% |
| Water | 0.3%min | 0.07% |
| Melting Point | 108-115 °C | 110.6-111.6°C |
| Ash | 0.03%max | 0.010% |
| Residue Formaldehyde | 0.03%max | 0.010% |
| Acid value(mgkoh/g) | 370-375 | 375 |
| Hydroxyl Value (mgKOH/g) | 728-782 | 752 |
| Fe3+(ppm) | 5 max | 2 |
| Na+ (ppm) | 150max | 45 |
| K+(PPM)+ | 10max | 1 |
| SO4-- (PPM) | 10 max | 2 |
| Acetone-Et3N Solube Experiment | Transparent | Transparent |
| Conclusion: The subject material conforms to the required standards. | | |

Analyst: 徐磊

Checke: 王文新

Authorized Signature & Stamps: 李明

