CERTIFICATE OF ANALYSIS

| Product Name | 2,2-Bis(hydroxymethyl)propionic acid(DMPA) |
|---------------------|--|
| Cas no | 4347-03-7 |
| Batch Number | 20230819 |
| Packing | In 25kgs net bag |
| Date Of Manufacture | June 19 2023 |
| Date Of Reported | June 19 2023 |

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

| Items | Specifications | Results | |
|--|------------------|--------------------|--|
| Apprearance | White crystal | White crystal | |
| Assay | 99%min | 99.36% | |
| Water | 0.3%min | 0.12% | |
| Melting Point | 178-187 ℃ | 180-1865 .℃ | |
| Ash | 0.03%max | 0.011% | |
| Residue Formaldehyde | 0.03%max | 0.011% | |
| Acid value(mgkoh/g) | 405-425 | 417 | |
| Hydroxyl Value (mgKOH/g) | 810-860 | 835 | |
| Fe3+(ppm) | 5 max | 2 | |
| Na+ (ppm) | 150max | 20 | |
| K+(PPM)+ | 10max | 2 | |
| CL- (PPM) | 10 max | 1 | |
| SO4 ² - (PPM) | 10 max | 5 | |
| Acetone-Et3N | Transparant | Transparent | |
| Solube Experiment | Transparent | | |
| Conclusion: The subject material conforms to the required standards. | | | |

Analyst:

徐磊

Checke: 王文新

