

## **Lonwin** CERTIFICATE OF ANALYSIS

Product Name	2,2-Bis(hydroxymethyl)propionic acid(DMPA)
Cas no	4767-03-7
Batch Number	20240508
Packing	In 25kgs net bag
Date Of Manufacture	May 08 2024
Date Of Reported	May 08 2024

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	
SO <sub>4</sub> <sup>2</sup> - (PPM)	10 max	5	
Acetone-Et3N	Transparent	Transparent	
Solube Experiment	Transparent		
Conclusion: The subject material conforms to the required standards.			

Authorized Signature & Stamps:李明 Analyst: 徐磊 Checke: 王文新