

MANUFACTURER:  
TTCA CO., LTD.  
NO.27, XIN'AN NAN ROAD, ANQIU, SHANDONG, CHINA



**CERTIFICATE OF ANALYSIS**

BATCH NO. M111505  
MANUFACTURING DATE: NOV.2021  
EXPIRY DATE:NOV.2024  
QUANTITY:2000BAGS/50MTS

PRODUCT NAME: CITRIC ACID MONOHYDRATE BP2011 (8-80 MESH)

DATE:  
NOV.09,2021

INVOICE NO. :  
TTCA2117242

THIS IS TO CERTIFY THAT THE ANALYSIS RESULT OF THE GOODS IS AS FOLLOWS:

NO	ITEM	BP2011	E330	USP34	FCC7	TTCA ENTERPRISE SPEC
1	CHARACTERISTICS	COLORLESS OR WHITE CRYSTAL				
2	IDENTIFICATION	PASS THE TEST				
3	LIGHT TRANSMITTANCE	/	/	/	/	≥96.5%
4	CLARITY&COLOUR OF SOLUTION	PASS TEST	/	PASS TEST	/	PASS TEST
5	ASSAY	99.5-100.5%	≥99.50%	99.5-100.5%	99.5-100.5%	99.8%
6	WATER	7.5-9.0%	≤8.8%	7.5-9.0%	≤8.8%	8.73%
7	SULPHATE ASH	≤0.1%	≤0.05%	≤0.1%	≤0.05%	≤0.05%
8	SULPHATE	≤150ppm	/	≤150ppm	/	≤30ppm
9	OXALATE	≤360ppm	≤100ppm	≤360ppm	NO TURBIDITY FORMS	≤20ppm
10	CALCIUM	/	/	/	/	≤20ppm
11	HEAVY METALS	≤10ppm	≤5ppm	≤10ppm	/	≤1ppm
12	IRON	/	/	/	/	≤1ppm
13	CHLORIDE	/	/	/	/	≤pm
14	READILY CARBURETED SUBSTANCES	NOT EXCEEDING THE STANDARD	OT EXCEEDING THE STANDARD	NOT EXCEEDING THE STANDARD	A≤0.52 T%≥30	K≤1.0
15	BACTERIAL ENDOTOXINS	≤0.5IU/mg	/	PASS TEST	/	≤0.5IU/mg
16	ALUMINIUM	≤0.2ppm	/	≤0.2ppm	/	≤0.2ppm
17	ARSENIC	/	≤1ppm	/	/	≤1ppm
18	MERCURY	/	≤1ppm	/	/	≤0.1ppm
19	LEAD	/	≤1ppm	/	≤0.5ppm	≤0.5ppm
20	TRIDODECYLAMINE	/	/	/	≤0.1ppm	≤0.1ppm
21	POLYCYCLIC AROMATIC HYDROCARBONS (PAH)	/	/	/	/	≤0.05 (260-350nm)
22	ISOCITRIC ACID	/	/	/	/	PASS TEST
23	WATER INSOLUBLE SUBSTANCES	/	/	/	/	FILTRATION TIME NOT MORETHAN 1MIN;FILTER MEMBRANCE DOESN'T BASCIALLY CHANGE COLOR; VISUAL MOTTLED PARTICLES NOT MORE THAN 3

This is to certify that CITRIC ACID MONOHYDRATE shipped to company LLC PepsiCo Holdings meets all the requirements of the Raw Material Specification (RMS) no. 1113.401.087. Furthermore, the batch has been analyzed and results comply with the RMS requirements - analysis results are shown below/above.

(STAMP)

山东柠檬生化有限公司  
\*TTCA Co., Ltd

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