

<b>Product name</b>	Vitamin C (ASCORBIC ACID) (Food grade)
<b>Batch Number</b>	202003125
<b>Packing Specifications</b>	25kg/ carton
<b>Batch Quantity</b>	20000kgs
<b>Test Amount</b>	200grams
<b>Manufacture Date</b>	Mar.28,2020
<b>Date of Certificate</b>	Mar.30,2020
<b>EXP time</b>	Mar.27,2023
<b>Test Standard</b>	GB14754-2010

ANALYSIS	SPECIFICATION	RESULTS
Appearance	White or yellowish crystalline or crystalline powder, odourless	Complies
Identify	Should be positive reaction	Positive reaction
	Should be positive reaction	Positive reaction
	Infrared spectroscopy is corresponding to reference spectrum.	Complies
Vitamin C (C <sub>6</sub> H <sub>8</sub> O <sub>6</sub> ,W/%)	≥99.0	99.60
Mesh	40-60	Complies
Specific rotation $\alpha_m(20^\circ\text{C}, D) / ((\rho) \cdot d$ $m^2 \cdot g^{-1})$	+20.5~+21.5	+20.9
Residue on ignition, W/%	≤0.10%	0.03%
<b>Heavy Metal</b>	≤10	<10
Pb/(mg/kg)	≤2	<2
As (mg/kg)	≤3	<3
Fe(mg/kg)	≤2	<2
Cu(mg/kg)	≤5	<5

<b>Conclusion</b>	Conform with specification of GB14754-2010
<b>Storage</b>	Store in sealed containers at cool & dry place. Protect from light, moisture and pest infestation.

Ke Nian

**Quality Assurance Officer**

Fang Wang

**Quality Control**

# Certificate of Analysis

## Ascorbic Acid

Product name: Ascorbic Acid                      Packing size: 25kg/件 (piece)  
 Batch No: 6052331912003                      Sample source: Workshop303  
 Quantity: 18000.00kg                      Packing Quantity: 720 件 (pieces)  
 Manufacture date: 2019.12.02                      Sampling date: 2019.12.03  
 Expiry date: 2022.12.01                      Report date : 2019.12.10  
 According to: BP2018/USP39/EP9.0/FCC8/E300

Item	Spec.	Result
[Characteristics]		
Appearance	White or almost white, crystalline powder or crystals	A white crystalline powder
Melting point	About 190°C, with decomposition	191°C
[Identification]		
Infrared Absorption spectrum	Infrared absorption spectrum accord with the reference spectrum of ascorbic acid CRS	Meets the requirements
pH (With 5% water solution)	2.1~2.6	2.3
pH (With 2% water solution)	2.4~2.8	2.5
[Tests]		
Appearance of solution	Clarity: clear; Colour: ≤BY7	Clarity: clear; Colour: <BY7
Specific optical rotation	+20.5° ~+21.5°	+21.1°
Loss on Drying	≤0.4%	0.04%
Impurity E	≤0.2%	Meets the requirements
Related substance	Impurity C: ≤0.15%;	Impurity C: Undetectable
	Impurity D: ≤0.15%;	Impurity D: Undetectable
	Unspecified impurities: ≤0.10%;	Unspecified impurities: Undetectable;
	Total impurities: ≤0.2%	Total impurities: Undetectable

Copper	≤5.0ppm	<5.0ppm
Iron	≤2.0ppm	<2.0ppm
Arsenic	≤3.0ppm	<3.0ppm
Lead	≤2.0ppm	<2.0ppm
Mercury	≤0.1ppm	<0.1ppm
Cadmium	≤1.0ppm	<1.0ppm
Heavy metals	≤10ppm	<10ppm
Sulphated ash	≤0.1%	0.04%
Residual solvents	Meets the requirements	Meets the requirements
[Assay]	99.0%~100.5%	99.8%
Conclusion: The product conforms with the above analysis standard		

Date: April 20 ,2020

Quality Department

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