



大连汉德姆精细化学品有限公司

DALIAN HANDOM CHEMICALS CO.,LTD.

Certificate of Analysis

Product Name: Ascorbic Acid
Standard: BP/USP/FCC
Manufacturing Date: Mar 23rd, 2022

Batch No.: HDC20220323
Quantity: 5000kg
Retest Date: Mar 22nd, 2025

Test Item	Specification	Test Result
Appearance	White or almost white crystalline powder	Conforms
Identification	Be Positive	Conforms
Melting Point	About 190°C	190.1°C
pH Value(2% Aqueous Solution)	2.4 ~ 2.8	2.54
pH Value(5% Aqueous Solution)	2.1 ~ 2.6	2.35
Clarity of Solution	Clear	Conforms
Color of Solution	Not more than BY ₇	<BY ₇
Copper(Cu)	Not more than 5ppm	<5ppm
Iron(Fe)	Not more than 2ppm	<2ppm
Heavy Metals	Not more than 10ppm	<10ppm
Lead(Pb)	Not more than 2ppm	<2ppm
Arsenic(As)	Not more than 3ppm	<3ppm
Mercury(Hg)	Not more than 0.1ppm	<0.1ppm
Oxalic Acid	Not more than 0.2%	<0.2%
Impurity E	Not more than 0.2%	<0.2%
Loss on Drying	Not more than 0.4%	<0.4%
Sulphate Ash(Residue on Ignition)	Not more than 0.1%	<0.1%
Specific Optical Rotation	+20.5° ~ +21.5°	+21.02°
Residual Solvents	Meets the standard	Conforms
Assay	99.0% ~ 100.5%	99.71%

Conclusion: This batch of product is complied with the BP/USP/FCC Standards.