

Kalchem International

Chemicals & Compounding Supplies

Certificate of Analysis

COA NO.: 15021410

Product: Ascorbic Acid

Analysis Standard: BP2014/USP37/ FCC8/ EU No 231/2012

Batch Number: 1150150155

Quantity: 2700kg

Manufacture Date: Jan. 24, 2015

Expiry Date: Jan. 23, 2018

Analysis contents	Analysis standard	Analysis results
Identification	Positive reaction	Pass
Melting point	190°C, approx	190°C
Specific rotation	+20.5°~+21.5° at 25°C	+21.0°
pH	2.1~2.6 (in 5% solution) 2.4~2.8 (in 2% solution)	2.3 Pass
Residue on ignition	≤0.1%	0.04%
Assay	99.0%~100.5%	99.8%
Loss on drying	≤0.15%	0.05%
Heavy metals	≤10ppm	<10ppm
Lead	≤2ppm	<2ppm
Mercury	≤1ppm	<1ppm
Clarity of solution	Clear	Pass
Color of solution	≤BY ₇	<BY ₇
Impurity E	≤0.2%	<0.2%
Copper	≤5ppm	<5ppm
Iron	≤2ppm	<2ppm
Arsenic	≤3ppm	<3ppm
Residual solvents	Meets requirement	Pass
Related substances	Impurity C ≤0.15%	Pass
	Impurity D ≤0.15%	Pass
	Unspecified impurities: each impurity ≤0.10%	Pass
	Total of impurities other than C and D ≤0.2%	Pass

Conclusion: The product conforms with the above analysis standard.

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