

Certificate of

Product Name: Molecular Weight: CAS# Molecular Formula: Starting Material: Extraction Solvent(s): Country of Origin: Batch Number: Manufacture Date: Retest Date: Ascorbic Acid (Vitamin C) 176 50-81-7 C6H8O6 Corn Steep Liquor, Yeast, Glucose *Methanol* China Varies Varies Varies

Test Results Obtained by PureBulk

ITEMS	SPECIFICATIONS	RESULTS
Vitamin C (Ascorbic Acid) (HPLC)	≥99.0%	99.74%
Loss on Drying (USP<731>)	≤0.4%	0.033%
Aerobic Plate Count	≤1000 cfu/g	<20 cfu/g
Coliforms	≤100 cfu/g	<20 cfu/g
E. Coli	Absence/g	Absent
Staph <i>aureus</i>	Negative	Absent
Yeast & Mold	≤100 cfu/g	<20 cfu/g
Salmonella	Negative	Absent
Pseudo. aeruginosa	Negative	Absent
Conclusion (PureBulk):	This product conforms to standards	

The following information is an indirect translation of information provided from the Manufacturer's Certificate of Analysis, and should not be used solely as an instrument for strict quality control.

ITEMS	SPECIFICATIONS	RESULTS	
Appearance	White or almost white, crystalline powder or colorless crystals	White crystalline powder	
Identification	Corresponds	Conforms	
Melting Point	189°C-193°C	190°C	
pH (5% W/V)	2.1-2.6	2.29	
pH (2% W/V)	2.4-2.8	2.58	
Specific Optical Rotation	+20.5°-+21.5°	+20.9°	
Appearance of Solution	Solution S is clear and not more intensely cleared than reference solution BY7	Up to Standard	
Heavy Metals	≤10 ppm	<10 ppm	
Copper	≤5 ppm	0. <mark>14</mark> ppm	
Iron (Fe)	≤2 ppm	0.06 ppm	
Mercury (Hg)	≤1 ppm	0.01 ppm	
Arsenic (As)	≤3 ppm	<3 ppm	
Lead (Pb)	≤2 ppm	<0.01 ppm	
Impurity E (Oxalic Acid)	≤0.2%	<0.2%	
Sulphated Ash (Residue on Ignition)	≤0.1%	0.03%	
Impurity C	≤0.15%	<0.01%	
Impurity D	≤0.15%	<0.01%	
Unspecified Impurities	≤0.10%	ND	
Total Impurities	≤0.2%	ND	
Methanol	≤3000 ppm	89 ppm	
40/40 mesh	-	97.6%	
80/80 mesh	-	70.6%	
100/100 mesh	-	57.5%	
Solubility	Soluble in water	Conforms	
Conclusion (Manufacturer):	This product conforms to BP2014/EP9/USP41/E300/FCC10 standards		
Additional Information:	Melamine Free Gluten-Free No Pesticides BSE/TSE Free GRAS - Yes Vegetarian/Vegan Sewer sludge used - No		
Sterilization Method:	Non-Irradiated/Non-EtO		
GMO Statement	Non-GMO		
Storage Conditions:	Keep in sealed container under 25°C.		
	Keep away from strong light, heat and moisture.		

Purebulk.Inc verifies that the information contained herein is true and correct to the best of our knowledge. Verified By: Candace Gibson / Ann Foote / Nicole Rammage (This document was produced electronically and is valid without signature.)