

## Certificate of Analysis

Product Name:	<b>Ascorbyl Palmitate</b>
CAS #:	<b>137-66-6</b>
Starting Material(s):	<b>Palmitic Acid, Ascorbic Acid</b>
Carrier:	<b>None</b>
Residual Solvent:	<b>Toluene &lt;899 ppm, Ethyl Acetate &lt;5000 ppm, Methylisobutylketonine &lt;5000 ppm</b>
Country of Origin:	<b>China</b>
Batch Number:	<b>Varies</b>
Manufacture Date:	<b>Varies</b>
Retest Date:	<b>Varies</b>

## Test Results Obtained by PureBulk

ITEMS	SPECIFICATIONS	RESULTS
Loss on Drying (USP<731>)	≤2.0%	0.369%
Ascorbyl Palmitate (HPLC)	≥95%	95.75%
Aerobic Plate Count	≤1000 cfu/g	<20 cfu/g
Coliforms	≤100 cfu/g	<20 cfu/g
<i>E. Coli</i>	Negative	Absent
<i>Staph aureus</i>	Negative	Absent
Yeast & Mold	≤100 cfu/g	<20 cfu/g
<i>Salmonella</i>	Negative	Absent
<i>Pseudo. aeruginosa</i>	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	A white or yellow-white powder	Conforms
Whiteness	≥68	88.7
State of Solution	Clear and Not more than BY <sub>4</sub>	Conforms
Optical Rotation	Between +21° and +24°	+22.0°
Melting Range	Between 107°C and 117°C	109-110°C
Residue on Ignition	≤0.1%	0.03%
Sulphated Ash	≤0.1%	Not Detected
Heavy Metals	≤4 ppm	<4 ppm
Lead (Pb)	≤2 ppm	<2 ppm
Arsenic (As)	≤1 ppm	<1 ppm
Cadmium (Cd)	≤0.5 ppm	Not Detected
Mercury (Hg)	≤0.01 ppm	Not Detected
Identification	Positive	Positive
Mesh	60 Mesh	100%
	80 Mesh	100%
	120 Mesh	90%
Solubility	Slightly soluble in water and in vegetable Oils. 1 gm dissolves in ~4.5ml of alcohol	Conforms
Conclusion (Manufacturer):	This product conforms to BP2015/EP8.0/USP38/FCCIX standards	

**Additional Information:** Vegetarian/Vegan || BSE/TSE Free || Non-Allergen || Melamine Free || Gluten-Free || No Pesticides || GRAS-Yes || Alcohol Free || Latex Free || PCBs Free || Dioxane Free || PAH Free || Sewage Sludge - No || Cruelty-Free || Food Grade

<b>Sterilization:</b>	Non-EtO    Non-Irradiated
<b>GMO Statement:</b>	Non-GMO
<b>Composition:</b>	≥98% Ascorbyl Palmitate ≤2% Loss on drying & Impurities (Heavy Metals & Palmitic Acid)
<b>Storage Conditions:</b>	<b>Keep in sealed container under 25°C.</b> <b>Keep away from strong light, heat and moisture.</b>

Purebulk.Inc verifies that the information contained herein is true and correct to the best of our knowledge.

Verified By: Candace Gibson / Nicole Rammage

( This document was produced electronically and is valid without signature. )