



## **SPECIFICATION SHEET**

**PRODUCT: Green Coffee Extract - Decaffeinated**  
Ingredient Contents: 100% Green Coffee Beans

### **Product Description**

An extract of polyphenolic antioxidants from green coffee beans maintaining coffee's natural caffeine content. Green Coffee Extract supplied to AFS is 100% green coffee, it contains no excipients, carriers or active agents, it is standardized to NLT 50% Chlorogenic acid.

**Standardized For: NLT 50.0% Chlorogenic Acids**  
**Manufactured with: 100% Green Coffee beans (*Genus: Coffea*)**

### **Specifications**

	<b>Specification</b>	<b>Method ID</b>
Appearance	Light Brown Powder	Visual
Assay	> 97.0%	USP <731>
Chlorogenic Acid	> 50.0%	HPLC <sup>1</sup>
Caffeine Content	< 4.0%	HPLC
Lead	< .25 ppm	ICP-MS AOAC 2013.06
pH	4.8 ± 0.40	AOAC 973.41 <sup>2</sup>
Solubility	99.5 w/w% ± 0.5	(3)
Arsenic	< 0.15 ppm	ICP-MS AOAC 2013.06
Cadmium	< 2.5 ppm	ICP-MS AOAC 2013.06
Mercury	< 1.5 ppm	ICP-MS AOAC 2013.06
Heavy Metals	< 10 ppm	ICP-MS AOAC 2013.06
<i>E. coli</i>	negative / 25 g	USP <62>
Total Coliform	< 3 MPN/g	AOAC 996.24, MPN, FDA BAM
<i>Salmonella</i>	negative / 375 g	USP <62>
<i>Pseudomonas aeruginosa</i>	negative / 25 g	USP <62>
<i>Staphylococcus</i>	negative / 25 g	USP <62>
Yeast & Mold	< 100 colonies /g	USP <61>
Aerobic Total Plate Count	< 10 <sup>4</sup> CFU/g	AOAC 990.12, FDA BAM
Residual Solvents		USP <467>
Ethanol	< 200 ppm	
Density	>0.40 g/ml	tapped

Meets the microbe requirements of the United States Pharmacopoeia.

- (1) HPLC, A.P.Craig et al Talanta 154 (2016) 481-485
- (2) AOAC 973.41 pH in Water modified for 0.50 w/w% solution
- (3) Internal AFS SOP-04-007, SOP-04-008, Ref for 0.50 w/w% solution

### Allergen Specifications

The Green Coffee Bean extract, should be **free** from the following known allergens:

Milk	Eggs
Fish	Shellfish / Shrimp
Nuts	Wheat
Soybeans	Lactose

### Additional Testing Validation Program

Foreign Matter: NMT 15 particles / 250 grams, no metallic particles, no insect parts

#### Chemical:

#### **Mycotoxin Screen:**

- Aflatoxin B1: < 2 ppb
- Aflatoxin B2, G1, G2 or sum of aflatoxins: < 5 ppb
- Ochratoxin A or B: < 10 ppb
- Fumonisin: < 100 ppb

**Pesticide Screen:** Comply with the USP34-NF29:561 requirements

### Packing Specifications

Available in 5 or 25 kg food grade plastic drums with polyethylene bags.

**Storage Specifications.** Store in well-closed containers in a dry place at ambient temperature (15-20°C). Material should be re-tested after storage for two years.

### Sterilization Specifications

Non-contact steam heat in drying operation. No approved radiation sterilization methods.

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