



## SPECIFICATION SHEET

**PRODUCT: Green Coffee Extract, Java.g, Product Code 1110**

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 for 45% Chlorogenic acid and 40% caffeine.

**Standardized For: 45.0% ± 5.0% Chlorogenic Acids**

**40.0% ± 2.0% Caffeine**

**Manufactured with: 100% Green Coffee, *Coffea***

### Specifications

	<b>Specification</b>	<b>Method ID</b>
Appearance	Light Brown Powder	Visual
Assay	> 97.0%	USP <731>
Chlorogenic Acid	45.0% ± 5.0%	HPLC <sup>1</sup>
Caffeine Content	40% ± 2%	HPLC
Lead	< 0.25 ppm	ICP-MS AOAC 2013.06
Solubility	> 99.5% w/w	(2)
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	< 10 colonies /g	USP <61>
Aerobic Total Plate Count	< 10 <sup>4</sup> CFU/g	AOAC 990.12, FDA BAM
Residual Solvents	< 400 ppm	USP <467>

Meets the microbe requirements of the United States Pharmacopoeia.

(1) HPLC, A.P.Craig et al Talanta 154 (2016) 481-485

(2) 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 Validation Testing Program

#### 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.

**CONFIDENTIAL DOCUMENT – DO NOT COPY, DO NOT DISTRIBUTE**

**Internal Release Document: Applied Food Sciences Inc.**

**FOR-03-006(023-E)**