



SPECIFICATION SHEET

Product: Naturally Derived Caffeine*
Product Code: PurCaf(N) - 09019021
Country of Origin: India
SPECIFICATIONS MEETS USP/FCC Requirements outside of moisture content (hydrous).

Ingredient Composition:

100% green coffee beans

Chemical name

Caffeine, derived from organic green coffee beans

| | Specification | Method ID |
|---------------------------|-------------------------------|---------------------------|
| Appearance | Off White Powder | visual |
| Identification | Positive | FT-NIR |
| Odor | Bland, Chalky, Slightly sweet | Organoleptic |
| Flavor | Bitter | Sensory |
| Moisture | < 0.5% | FCC (Karl Fischer) |
| Caffeine Content (as is) | 94.5%-99.0% | FCC, Caffeine by HPLC |
| Lead | < 0.25 ppm | ICP-MS AOAC 2013.06 |
| Solubility | 99.5% +/- 0.5% | (1) |
| Arsenic | < 0.15 ug/g | ICP-MS AOAC 2013.06 |
| Cadmium | < 2.5 ug/g | ICP-MS AOAC 2013.06 |
| Mercury | < 1.50 ug/g | 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>Staphylococcus</i> | negative / 25 g | USP <62> |
| Yeast & Mold | < 100 cfu /g | USP <61> |
| Aerobic Total Plate Count | < 1,000 cfu/g | AOAC 990.12, FDA BAM |
| Residual Solvents | ND* (< 10 ppm) | USP <467> |

Meets the microbe requirements of the United States Pharmacopoeia.

(1) Internal AFS SOP-04-008, Ref for 0.50 w/w% solution

PurCaf(N)[™] is an Allergen Free Product as defined by the Food Allergy Labelling and Consumer Protection Act of 2004. Product contains no additives, carriers and excipients.

Main characteristics

PurCaf[™] is odorless and slightly bitter in solution.

Solubility in water : soluble in water
Specific Gravity : ~ 1.23

There is no evidence to demonstrate or suggest a hazard when employed at levels that are currently in use.

Allergen

The AFS Green Coffee Bean extract, PurCaf(N)TM, is **free** from the following known allergens:

| | | |
|----------|--------------------|--------|
| Milk | Eggs | Gluten |
| Fish | Shellfish / Shrimp | |
| Nuts | Wheat | |
| Soybeans | Lactose | |

For the full list of free allergens in the AFS green coffee extract please refer to AFS PurCaf(N)TM Allergen Statement.

Aflatoxin:

- Aflatoxin B1: < 2 ppb
- Aflatoxin B2, G1, G2 or sum of aflatoxins: < 3-5 ppb
- Ochratoxin A or B: < 3-5 ppb
- Fumonisin: < 100 ppb

Pesticide Screens: Comply with the USP34-NF29:561 requirements, US NOP Organic Requirements

Packing

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

Storage

Hydroscopic. 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

Non-contact steam heat in drying operation.

Applications

Pharma & Nutritional Supplements

PurCaf(N)TM is used as a nutritional supplement in tablet or capsule form. As an energy stimulator in food and beverage applications.

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