

DATE: **05/31/2023**

## CERTIFICATE OF ANALYSIS

Product: **OPTI-PURE CAPS**  
Product code : **18483**  
Prepared For: **NUETHIX FORMULATIONS**

Lot No: **2303419**  
Serving Size : **3 Caps**  
Manufacture Date: **04/2023**

### PHYSICAL CHARACTERISTICS

| <u>TEST</u>            | <u>SPECIFICATION</u>                    | <u>RESULT</u>           | <u>METHOD</u>   |
|------------------------|-----------------------------------------|-------------------------|-----------------|
| Average Capsule Weight | 798mg - 882mg                           | 848 mg                  | Balance Reading |
| Capsule Size           | "00"                                    | "00"                    | Organoleptic    |
| Disintegration         | ≤ 30 Min                                | 11 Min                  | USP <2040>      |
| Capsule Color          | Natural/Natural                         | Natural/Natural         | Organoleptic    |
| Capsule Type           | Gelatin                                 | Gelatin                 | Chemical Test   |
| Blend Color            | Light Yellow to Green<br>Yellow w/Spots | Light Yellow<br>w/Spots | Organoleptic    |

### AMOUNT PER SERVING

#### INGREDIENT

|                                                                          |                            |          |         |
|--------------------------------------------------------------------------|----------------------------|----------|---------|
| Vitamin A (As Retinyl Palmitate)                                         | 448mcg - 963.2mcg          | 672mcg   | PPCS‡   |
| Vitamin A (As Beta Carotene)                                             | 57mcg - 122.55mcg          | 85.5mcg  | PPCS‡   |
| Vitamin C (As Magnesium Ascorbate)                                       | 180mg - 207mg              | 198mg    | PPCS‡   |
| Vitamin E (As D-Alpha Tocopheryl Succinate)                              | 69mg - 134.55mg            | 89.7mg   | PPCS‡   |
| Vitamin B1 (As Thiamine HCl)                                             | 8.3mg - 14.94mg            | 10.2mg   | HPLC    |
| Vitamin B2 (Riboflavin)                                                  | 8.3mg - 14.94mg            | 9.18mg   | HPLC    |
| Vitamin B3 (Niacin)                                                      | 10mg - 13.5mg              | 13mg     | PPCS‡   |
| Vitamin B6 (As Pyridoxal-5-Phosphate)                                    | 5mg - 6.75mg               | 6.5mg    | PPCS‡   |
| Vitamin B6 (As Pyridoxine HCl)                                           | 5mg - 9mg                  | 6.51mg   | HPLC    |
| Folate (As L-5-Methyltetrahydrofolate Calcium) (Biofolate®)              | 340mcg - 640mcg<br>DFE DFE | 510mcg   | PPCS‡   |
| Vitamin B12 (As Methylcobalamin) On Dicalcium Phosphate                  | 0.4mcg - 0.8mcg            | 0.6mcg   | PPCS‡   |
| Biotin On Dicalcium Phosphate                                            | 0.66mcg - 1.32mcg          | 0.99mcg  | PPCS‡   |
| Pantothenic Acid (As Calcium-D-Pantothenate)                             | 33.3mg - 56.61mg           | 39.96mg  | PPCS‡   |
| Magnesium (As Magnesium Ascorbate, Magnesium Citrate & Magnesium Malate) | 50mg - 66.2mg              | 54.69mg  | ICP-OES |
| Zinc (As Zinc Picolinate)                                                | 2mg - 2.6mg                | 2.058mg  | ICP-OES |
| Selenium (As L-Selenomethionine)                                         | 0.33mcg - 0.56mcg          | 0.363mcg | PPCS‡   |
| Manganese (As Traacs® Manganese Bislycinate Chelate)                     | 495mcg - 668.25mcg         | 544.5mcg | PPCS‡   |
| Molybdenum (As TRAACS® Molybdenum Glycinate Chelate)                     | 51mcg - 86.7mcg            | 56.1mcg  | PPCS‡   |
| Calcium (As Calcium-D-Glucarate)                                         | 33mg - 47.43mg             | 38.25mg  | ICP-OES |
| Milk Thistle (Silybum Marianum) Seed Extract 80% Silymarins              | 100mg - 140mg              | 105mg    | PPCS‡   |
| Alpha Lipoic Acid                                                        | 100mg - 125mg              | 105mg    | PPCS‡   |

‡In accordance with 21 CFR § 111.75 (c) or (d) ingredient is exempt from testing. Result is substantiated through component testing and/or examination; in-process testing, examination, and/or monitoring; and other aspects of the established Production and Process Control System (PPCS).



# NuEthix

FORMULATIONS

|                                       |                   |         |       |
|---------------------------------------|-------------------|---------|-------|
| N-Acetyl-L-Cysteine                   | 100mg - 125mg     | 105mg   | PPCS† |
| DIM (Diindolylmethane)                | 80mg - 100mg      | 84mg    | PPCS† |
| L-Methionine                          | 66.7mg - 83.38mg  | 70.04mg | PPCS† |
| Glycine                               | 66.7mg - 83.38mg  | 70.04mg | PPCS† |
| L-Glutamic Acid                       | 66.7mg - 73.37mg  | 70.04mg | PPCS† |
| Taurine                               | 66.7mg - 73.37mg  | 70.04mg | PPCS† |
| L-Glutamine [99%]                     | 66.7mg - 73.37mg  | 70.04mg | PPCS† |
| Choline (As Choline Bitartrate)       | 26.68mg - 29.35mg | 28.01mg | PPCS† |
| Quercetin Dihydrate                   | 66.7mg - 93.38mg  | 69.21mg | HPLC  |
| Inositol                              | 33.3mg - 41.63mg  | 35.18mg | PPCS† |
| L-Ornithine HCl                       | 33.3mg - 41.63mg  | 35.18mg | PPCS† |
| Broccoli Sprout Extract 0.4%          | 33.3mg - 46.62mg  | 35.18mg | PPCS† |
| Sulforaphane                          |                   |         |       |
| L-Glutathione                         | 16.7mg - 20.88mg  | 17.54mg | PPCS† |
| L-Serine                              | 16.7mg - 18.37mg  | 17.54mg | PPCS† |
| L-Histidine HCl                       | 16.7mg - 18.37mg  | 17.54mg | PPCS† |
| L-Carnitine (As L-Carnitine Tartrate) | 16.7mg - 18.37mg  | 17.54mg | PPCS† |
| Coenzyme Q10                          | 8.3mg - 10.38mg   | 8.72mg  | PPCS† |
| Grape Seed Extract 95% Polyphenols    | 3.3mg - 4.62mg    | 3.47mg  | PPCS† |
| Superoxide Dismutase (SOD)            | 33mcg - 37.95mcg  | 36.3mcg | PPCS† |
| Catalase                              | 15mcg - 27.75mcg  | 16.5mcg | PPCS† |

## **CONTAMINANTS**

### **MICROBIOLOGICAL**

|                            |                        |           |         |
|----------------------------|------------------------|-----------|---------|
| Total Aerobic Plate Count  | <10 <sup>4</sup> cfu/g | 100 cfu/g | USP<61> |
| Total Yeast and Mold (Y&M) | <10 <sup>3</sup> cfu/g | <10 cfu/g | USP<61> |
| Enterobacteriaceae         | <10 <sup>2</sup> cfu/g | <10 cfu/g | USP<62> |
| Salmonella spp.            | Absent                 | Absent    | USP<62> |
| E. Coli                    | Absent                 | Absent    | USP<62> |
| Staphylococcus aureus      | Absent                 | Absent    | USP<62> |

### **HEAVY METALS:**

|                     |              |            |        |
|---------------------|--------------|------------|--------|
| Mercury (2µg/day)   | ≤ 0.8354 ppm | 0.0155 ppm | ICP/MS |
| Lead (8.8µg/day)    | ≤ 3.6759 ppm | 0.0971 ppm | ICP/MS |
| Arsenic (10µg/day)  | ≤ 4.1771 ppm | 0.0268 ppm | ICP/MS |
| Cadmium (4.1µg/day) | ≤ 1.7126 ppm | 0.0373 ppm | ICP/MS |

### **GLUTEN**

|            |         |       |
|------------|---------|-------|
| NMT 20 ppm | < 4 ppm | ELISA |
|------------|---------|-------|

### **B-LACTOGLOBULIN**

|                            |        |       |
|----------------------------|--------|-------|
| Not Detected (LOQ 5.0 ppm) | < 5ppm | ELISA |
|----------------------------|--------|-------|

### **CASEIN**

|                            |          |       |
|----------------------------|----------|-------|
| Not Detected (LOQ 2.5 ppm) | < 2.5ppm | ELISA |
|----------------------------|----------|-------|

**QUALITY CONTROL**

**BACTOLAC PHARMACEUTICAL, INC.**

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