

**PD BALANCE**  
**PRODUCT INFORMATION**  
**CERTIFICATE OF ANALYSIS**

**PD Balance 1**  
**+ PD Balance 2**  
**+ TUDCA Capsules**

**PD Balance 1**

| Product and Batch Information  |  |
|--|--|
| Product Name: <b>PD Balance 1</b>  |  |
| Manufactured by: Marula & Co, Ramat Negev, Israel, info@marulalab.org<br>Batch N.: PDB1-250126 |  |
| Manufacture Date: Jan 2026   | Expiration Date: 24 months from production |

PD Balance 1 Productt Information

**Product Name: PD Balance 1 ( Marula seed oil powder )**

**Ingredients:** Marula oil, Manitol, Inulin HSI, Sunflower Lecitin, ammonium glycyrrhizinate (liquoric), Vitamin B1.

**Storage Conditions and Shelf Life:** The product may be stored for 24 months from the date of manufacture in the original unopened package and at a temperature below 25°C and relative humidity below 50%. Once opened, it is recommended to consume the whole drum or refill with nitrogen before sealing.

**Packing:** 10 gr pouch.

**Country of Origin:** The country of origin of this product is Israel. The raw materials utilized in its production are manufactured at ISO 22716 certified facilities.

**GMO Statement:** We hereby confirm, to the best of our knowledge, that the raw materials used to produce this product are derived from plants that are not genetically modified and do not contain GMO-DNA. Following Regulation (EC) No 1829/2003 and 1830/2003, this product does not require additional marking to indicate the presence or use of genetically modified organisms.

**Kosher Certificate:** This product is certified as Kosher Parve by Rabanut Marom Galil.

## PD Balance 1 Certificate of Analysis

| Test                                  | Results      | Specification | Unit                   | Method        |
|---------------------------------------|--------------|---------------|------------------------|---------------|
| <b>Physical Identification</b>        |              |               |                        |               |
| Appearance                            | pass         |               |                        | visual        |
| <b>Chemical Identification</b>        |              |               |                        |               |
| Loss on drying                        | >4           | 4.0 maximum   | %                      | IH method     |
| Fat content                           | 30-40        | 35 minimum    | %                      | AOAC 991.36   |
| Peroxide value                        | -            | 10 maximum    | meq O <sub>2</sub> /kg | AOCS Cd 8b-90 |
| Anisidine value                       | -            | 5 maximum     | -                      | IH method     |
| <b>Microbiological Contaminations</b> |              |               |                        |               |
| Total microbial count                 | 45           | 100 maximum   | cfu/g                  | Ph.Eur2.6.12  |
| Yeast and molds                       | <10          | 100 maximum   | cfu/g                  | Ph.Eur2.6.12  |
| Staphylococcus aureus                 | Not Detected | Negative      | /g                     | Ph.Eur2.6.13  |
| Pseudomonas aeruginosa                | Not Detected | Negative      | /g                     | Ph.Eur2.6.13  |
| E. Coli                               | Not Detected | Negative      | /g                     | Ph.Eur2.6.13  |
| Candida albicans                      | Not Detected | Negative      | /g                     | Ph.Eur2.6.13  |

## PD Balance 2

| Product and Batch Information  |  |
|--|--|
| Product Name: <b>PD Balance 2</b>  |  |
| Manufactured by: Marula & Co, Ramat Negev, Israel, info@marulalab.org<br>Batch N.: PDB1-250126 |  |
| Manufacture Date: Jan 2026   | Expiration Date: 24 months from production |

### PD Balance 2 Productt Information

#### Product Name: PD Balance 2

**Ingredients:** Freeze Dried Marula Fruit Powder, N-Acetyl-Cysteine (NAC), Vitamin B3 nicotinamide riboside chloride (NR), Phosphatidylserine (PS), Ambroxol, Salidroside, Ubiquinol-10, Hydroxytyrosol (HXT), Oleuropein.

**Storage Conditions and Shelf Life:** The product may be stored for 24 months from the date of manufacture in the original unopened package and at a temperature below 25°C and relative humidity below 50%. Once opened, it is recommended to consume the whole drum or refill with nitrogen before sealing.

**Packing:** 11 gr pouch.

**Country of Origin:** The country of origin of this product is Israel. The raw materials utilized in its production are manufactured at ISO 22716 certified facilities.

**GMO Statement:** We hereby confirm, to the best of our knowledge, that the raw materials used to produce this product are derived from plants that are not genetically modified and do not contain GMO-DNA. Following Regulation (EC) No 1829/2003 and 1830/2003, this product does not require additional marking to indicate the presence or use of genetically modified organisms.

**Kosher Certificate:** This product is certified as Kosher Parve by Rabanut Ramat Negev.

**PD Balance 2 Certificate of Analysis**

**Freeze Dried Marula Fruit Powder**

| Test                                  | Results      | Specification      | Unit                 | Method                                |
|---------------------------------------|--------------|--------------------|----------------------|---------------------------------------|
| <b>Physical Identification</b>        |              |                    |                      |                                       |
| Appearance                            | pass         | Yellowish powder   |                      | visual                                |
| Taste                                 | pass         | Marula fruit taste |                      | tasting                               |
| <b>Chemical Identification</b>        |              |                    |                      |                                       |
| Heavy Metals                          |              |                    |                      |                                       |
| Arsenic                               | <0.05        | Complies           | mg/kg                | Procedure 220.5010                    |
| Cadmium                               | <0.005       | Complies           | mg/kg                | Procedure 220.5010                    |
| Mercury                               | <0.008       | Complies           | mg/kg                | Procedure 220.5010                    |
| Lead                                  | 0.055        | Complies           | mg/kg                | Procedure 220.5010                    |
| Pesticides                            | Not detected |                    | mg/gr                | In house procedure by GC-MS, LC-MS/MS |
| <b>Microbiological Contaminations</b> |              |                    |                      |                                       |
| Total microbial count                 | 70           | 1000 maximum       | cfu/g                | SI 885/3                              |
| Yeast & Moulds                        | <10          | 100 maximum        | cfu/g                | SI 885/82                             |
| Salmonella                            | Not Detected | Not detected       | Per 25g /Sponge/Swab | ISO 6579                              |
| E. Coli                               | <10          | 10 maximum         | cfu/g                | ISO 16649-2                           |

**N-Acetyl-Cysteine (NAC)**

| Product Name: N-Acetyl-L-cysteine                            |                              |                                |
|--|------------------------------|--------------------------------|
| CAS No.: 616-99-1  |                              |                                |
| Test sample: 100gram   |                              | Sample base: 2000gram          |
| Manufacture Date: 1st March,2025                             |                              | Analysis Date: 1st Match, 2025 |
| Batch NO.: HNB250301-2                                       |                              |                                |
| Storage: Store in cool&dry place, in well-closed containers. |                              |                                |
| Shelf life: 24 Months when properly stored.                  |                              |                                |
| ITEMS OF ANALYSIS  | SPECIFICATIONS               | RESULT                         |
| Appearance   | White crystalline powder     | Conforms                       |
| Identification   | Infrared absorption spectrum | Conforms                       |
| Assay  | 98.5%~101.0%                 | 99.79%                         |
| PH   | 2.0~2.8                      | 2.4                            |
| Specific rotation [α] D                                      | +21.3°~ +27.0°               | +23.92°                        |
| State of solution  | ≥98.0%                       | 98.8%                          |
| Loss on drying   | ≤0.5%                        | 0.23%                          |
| Heavy metals(Pb)   | ≤10ppm                       | <10ppm                         |
| Chloride(Cl)   | ≤0.04%                       | <0.04%                         |
| Ammonium(NH4)  | ≤0.02%                       | <0.02%                         |
| Sulfate(SO4)   | ≤0.030%                      | <0.030%                        |
| Iron(Fe)   | ≤20ppm                       | <20ppm                         |
| Arsenic(As2O3)   | ≤1ppm                        | <1ppm                          |
| E.coli   | <10cfu/g                     | <3cfu/g                        |
| Staphylococcus   | Negative                     | Conforms                       |
| Yeast & Mold   | <1000cfu/g                   | <60cfu/g                       |
| Assay  | 98.0~102%                    | 99.4%                          |

Vitamin B3 nicotinamide riboside chloride

| CERTIFICATE OF ANALYSIS                         |                              |                                |
|---|------------------------------|--------------------------------|
| Product and Batch Information                   |                              |                                |
| Product Name: Nicotinamide Riboside Chloride    |                              | CAS NO.: 23111-00-4            |
| Batch No.: LSM251125                            |                              | Quantity: 100KGS               |
| Manufacture Date: Nov. 25, 2025                 | Analysis Date: Nov. 25, 2025 | Expiration Date: Nov. 24, 2027 |
| Analysis Items                                  | Specifications               | Results                        |
| <b>Physical &amp; Chemical</b>                  |                              |                                |
| Appearance                                      | White to off-white powder    | White to off-white powder      |
| Purity(HPLC)                                    | 97.0% Min                    | 99.58%                         |
| Loss on drying                                  | 0.5% Max                     | 0.16%                          |
| Organic solvent                                 | 0.1% Max                     | 0.02%                          |
| <b>Heavy metals</b>                             |                              |                                |
| Pb  | 0.1ppm Max                   | <0.1ppm                        |
| As  | 0.1ppm Max                   | <0.1ppm                        |
| Hg  | 0.1ppm Max                   | <0.1ppm                        |
| Cd  | 0.2ppm Max                   | <0.2ppm                        |
| <b>Microbiology Control</b>                     |                              |                                |
| Total Plate Count                               | 500CFU/g Max                 | <500CFU/g                      |
| Yeast & Mold                                    | 50CFU/g Max                  | <10CFU/g                       |
| Coliforms                                       | 0.92MPN/g Max                | <0.3MPN/g                      |
| Salmonella                                      | Negative/25g                 | Negative                       |
| Staph Aureus                                    | Negative/25g                 | Negative                       |
| <b>Conclusion: Meet in-house specification.</b> |                              |                                |

Phosphatidylserine (PS)

| CERTIFICATE OF ANALYSIS                            |   |                                  |
|--|---|----------------------------------|
| Product and Batch Information                      |   |                                  |
| Product Name: Phosphatidylserine(Sunflower)        |   |                                  |
| Batch No.: FRM250406                               |   | Quantity: 100kg                  |
| Manufacture Date: April. 06, 2025                  | Analysis Date: April. 10, 2025                                      | Expiration Date: April. 05, 2025 |
| Analysis Items                                     | Specifications  | Results                          |
| Assay(Phosphatidylserine)                          | 60.0% Min.  | 63.1%                            |
| <b>Physical &amp; Chemical</b>                     |   |                                  |
| Appearance   | Light to brown yellow powder  | Yellow powder                    |
| Odor & Taste                                       | With the fragrance and taste of the product, without peculiar smell | Complies                         |
| Impurity   | No visible exogenous impurity                                       | No visible exogenous impurity    |
| Water  | 2.0% Max  | 0.88%                            |
| Peroxide value                                     | 2.5 meq/kg Max  | 0.7 meq/kg                       |
| Acetone insoluble                                  | 95.0% Min.  | 97.1%                            |
| <b>Heavy metal</b>                                 |   |                                  |
| Pb   | 0.09mg/kg Max   | Note detected                    |
| As   | 0.1mg/kg Max  | Note detected                    |
| Hg   | 0.1mg/kg Max  | Note detected                    |
| Cd   | 1.0mg/kg Max  | <0.003cfu/g                      |
| <b>Microbiology Control</b>                        |   |                                  |
| Total plate count                                  | 1000cfu/gm Max  | 20cfu/g                          |
| Yeast & Mold                                       | 50cfu/g Max   | <10cfu/g                         |
| Coliforms  | 10cfu/g Max   | <10cfu/g                         |
| <b>Conclusion Complies with the specification.</b> |   |                                  |

### Salidroside

| Certificate of Analysis        |                |          |
|--------------------------------|----------------|----------|
| Product Name:                  | Salidroside    |          |
| Botanical Name:                | Rhodiola rosea |          |
| Batch Number:                  | HJT-170923     |          |
| Batch Quantity:                | 300kg          |          |
| Date:                          | 2025-09-03     |          |
| Item                           | Specification  | Result   |
| <b>Assay(UV)</b>               |                |          |
| Salidroside                    | ≥98%           | 98.32%   |
| <b>Chemical Control</b>        |                |          |
| Ash content:                   | <2%            | 0.5%     |
| Total Heavy Metals:            | <10PPM         | Complies |
| Arsenic:                       | <2PPM          | Complies |
| Pb:                            | <2PPM          | Complies |
| Solvent residues:              | <0.02%         | Complies |
| Pesticides:                    | Negative       | Negative |
| <b>Physical Control</b>        |                |          |
| Appearance:                    | Fine powder    | Complies |
| Color:                         | Reddish Brown  | Complies |
| Odor:                          | Characteristic | Complies |
| Bulk Density:                  | 40-60g/100ml   | Complies |
| Mesh Size:                     | 80 mesh        | Complies |
| Loss On Drying:                | <2%            | 1.06%    |
| <b>Microbiological Control</b> |                |          |
| Total Plate Count:             | <1000CFU/gm    | Complies |
| Yeast&Mold:                    | <100CFU/gm     | Complies |
| Salmonella:                    | Negative       | Complies |
| E.Coli:                        | Negative       | Complies |
| Staphylococcus:                | Negative       | Complies |
| Storage:                       | Cool and Dry   |          |
| Shelf life:                    | 24 Months      |          |

### Ubiquinol-10

| CERTIFICATE OF ANALYSIS               |              |               |       |                       |
|---------------------------------------|--------------|---------------|-------|-----------------------|
| Test                                  | Results      | Specification | Unit  | Method                |
| <b>Physical Identification</b>        |              |               |       |                       |
| Appearance                            | pass         | Orange powder |       | visual                |
| Taste                                 | pass         | sweet         |       | IH method             |
| <b>Chemical Identification</b>        |              |               |       |                       |
| Loss on drying                        | 2.91         | 4.0 maximum   | %     | IH method             |
| Heavy Metals                          |              |               |       |                       |
| Arsenic                               | Complies     | 1 maximum     | mg/kg | IH method             |
| Cadmium                               | Complies     | 1 maximum     | mg/kg | IH method             |
| Mercury                               | Complies     | 0.5 maximum   | mg/kg | IH method             |
| Lead                                  | Complies     | 3 maximum     | mg/kg | IH method             |
| Coenzyme Q10 (Ubiquinone) content     | 301          | 280 minimum   | mg/gr | IH method             |
| <b>Microbiological Contaminations</b> |              |               |       |                       |
| Total microbial count                 | <10          | 1000 maximum  | cfu/g | USP <61>/Ph.Eur2.6.12 |
| Yeast & Moulds                        | <10          | 100 maximum   | cfu/g | USP <61>/Ph.Eur2.6.12 |
| Salmonella                            | Not Detected | Negative      | /25g  | USP <62>/Ph.Eur2.6.13 |
| E. Coli                               | Not Detected | 10 maximum    | cfu/g | USP <62>/Ph.Eur2.6.13 |

### Hydroxytyrosol (HXT)

| CERTIFICATE OF ANALYSIS          |   |                                |
|----------------------------------|---|--------------------------------|
| Product and Batch Information    |   |                                |
| Product Name: Olive leaf extract | Botanical Source: Olea europaea L.      |                                |
| Batch No.: FRM250516             | Quantity: 100KGS                        |                                |
| Manufacture Date: May. 16, 2025  | Analysis Date: May. 20, 2025            | Expiration Date: May. 15, 2027 |
| Analysis Items                   | Specifications                          | Results                        |
| Assay(Hydroxytyrosol)            | 20.0% Min                               | 20.12%                         |
| Physical & Chemical              |   |                                |
| Appearance                       | Brown yellow powder                     | Complies                       |
| Odor                             | Characteristic                          | Characteristic                 |
| Tasted                           | Characteristic                          | Characteristic                 |
| Particle size                    | 95% pass 80 mesh                        | Complies                       |
| Loss on drying                   | 7.0% Max                                | 3.94%                          |
| Ash                              | 5.0% Max                                | 3.15%                          |
| Heavy metals                     |   |                                |
| As                               | 2ppm Max                                | <2ppm                          |
| Pb                               | 2ppm Max                                | <2ppm                          |
| Cd                               | 1ppm Max                                | <1ppm                          |
| Hg                               | 0.1ppm Max                              | <0.1ppm                        |
| Microbiology Control             |   |                                |
| Total Plate Count                | 1000CFU/g Max                           | <1000CFU/g                     |
| Yeast & Mold                     | 100CFU/g Max                            | <100CFU/g                      |
| E.Coil                           | Negative                                | Negative                       |
| Salmonella                       | Negative                                | Negative                       |
| S.aureus                         | Negative                                | Negative                       |
| <b>Conclusion</b>                | <b>Complies with the specification.</b> |                                |

### Oleuropein

| CERTIFICATE OF ANALYSIS          |   |                                 |
|----------------------------------|---|---------------------------------|
| Product and Batch Information    |   |                                 |
| Product Name: Olive leaf extract | Botanical Source: Olea europaea L.      |                                 |
| Batch No.: FRM250612             | Quantity: 100KGS                        |                                 |
| Manufacture Date: June. 12, 2025 | Analysis Date: June. 15, 2025           | Expiration Date: June. 11, 2027 |
| Analysis Items                   | Specifications                          | Results                         |
| Assay(Oleuropein)                | 40.0% Min                               | 40.10%                          |
| Physical & Chemical              |   |                                 |
| Appearance                       | Yellowish-green powder                  | Complies                        |
| Odor                             | Characteristic                          | Characteristic                  |
| Tasted                           | Characteristic                          | Characteristic                  |
| Particle size                    | 95% pass 80 mesh                        | Complies                        |
| Loss on drying                   | 7.0% Max                                | 2.56%                           |
| Ash                              | 5.0% Max                                | 2.73%                           |
| Heavy metals                     |   |                                 |
| As                               | 2ppm Max                                | <2ppm                           |
| Pb                               | 2ppm Max                                | <2ppm                           |
| Cd                               | 1ppm Max                                | <1ppm                           |
| Hg                               | 0.1ppm Max                              | <0.1ppm                         |
| Microbiology Control             |   |                                 |
| Total Plate Count                | 1000CFU/g Max                           | <1000CFU/g                      |
| Yeast & Mold                     | 100CFU/g Max                            | <100CFU/g                       |
| E.Coil                           | Negative                                | Negative                        |
| Salmonella                       | Negative                                | Negative                        |
| S.aureus                         | Negative                                | Negative                        |
| <b>Conclusion</b>                | <b>Complies with the specification.</b> |                                 |

Ambroxol

**Certificate of Analysis-Ambroxol**

**CAS: 18683-91-5**

**Batch Number: FTF0250811    Batch Quantity: 500kg**

**Manufacture Date: Aug.09<sup>th</sup>,2025    Analysis Date:Aug.10<sup>th</sup>,2025    Certificate Date: Aug.11<sup>th</sup>,2025**

**Storage**    Store in cool & dry place. Store in well-closed containers.  
**Shelf life**    3 years when properly stored.

| Item                   | Specification   | Results |
|------------------------|---|---------|
| Assay                  | 99.0 ~ 101.0%   | 99.6%   |
| Appearance             | White or yellowish crystalline powder                     | confirm |
| Appearance of solution | Not more intensely colored than the reference solution Y6 | confirm |
| Solubility             | A) Water: sparingly soluble                               | confirm |
|                        | B) Methanol: soluble                                      | confirm |
|                        | C) Methylene Chloride: practically insoluble              | confirm |
| Identification         | A) UV Absorption: 3.2 ~ 3.4                               | 3.15    |
|                        | B) IR Spectrum  | confirm |
|                        | C) TLC  | confirm |
|                        | D) Chlorides Test   | confirm |
| Related substances     | Individual impurity: 0.1% Max                             | 0.02%   |
|                        | Total impurities: 0.3% Max                                | 0.06%   |
| Heavy metals           | 20ppm Max   | 8ppm    |
| Loss on drying         | <1%   | 0.6%    |
| Sulfated ash           | 0.1% Max  | 0.03%   |
| PH                     | 4.5 ~ 6.0   | 4.8     |

## TUDCA Tauroursodeoxycholic acid 500 mg Capsules

| Product and Batch Information  |  |
|--|--|
| Product Name: TUDCA Tauroursodeoxycholic acid 500 mg Capsules                                  |  |
| Manufactured by: Marula & Co, Ramat Negev, Israel, info@marulalab.org<br>Batch N.: PDB1-250126 |  |
| Manufacture Date: Jan 2026   | Expiration Date: 24 months from production |

**Ingredients:** Tauroursodeoxycholic acid.

**Storage Conditions and Shelf Life:** The product may be stored for 24 months from the date of manufacture in the original unopened package and at a temperature below 25°C and relative humidity below 50%. Once opened, it is recommended to consume the whole drum or refill with nitrogen before sealing.

**Packing:** 500mg capsule

**Country of Origin:** The country of origin of this product is Israel. The raw materials utilized in its production are manufactured at ISO 22716 certified facilities.

**GMO Statement:** We hereby confirm, to the best of our knowledge, that the raw materials used to produce this product are derived from plants that are not genetically modified and do not contain GMO-DNA. Following Regulation (EC) No 1829/2003 and 1830/2003, this product does not require additional marking to indicate the presence or use of genetically modified organisms.

TUDCA Tauroursodeoxycholic aci

| CERTIFICATE OF ANALYSIS                             |   |                                |
|---|---|--------------------------------|
| Product and Batch Information                       |   |                                |
| Product Name: Tauroursodeoxycholic acid             |   |                                |
| Source: Synthetic                                   | CAS No.: 14605-22-2                             |                                |
| Batch No.: 250602                                   | Quantity: 500KG                                 |                                |
| Manufacture Date: Jun. 01, 2025                     | Analysis Date: Jun. 05, 2025                    | Expiration Date: May. 31, 2027 |
| Analysis Items                                      | Specifications                                  | Results                        |
| <b>Assay</b>  | 98.0% Min                                       | 99.8%                          |
| <b>Physical &amp; Chemical</b>                      |   |                                |
| Appearance  | White to almost white, micro crystalline powder | White micro crystalline powder |
| Specific rotation                                   | +35.5°~+37.5°                                   | +37.1°                         |
| Loss on drying                                      | 6.0%~8.0%                                       | 6.4%                           |
| Sulfated ash  | 0.1% Max  | 0.08%                          |
| Impurity C  | 0.2% Max  | <0.2%                          |
| Impurity A  | 0.5% Max  | 0.38%                          |
| Impurity B  | 0.5% Max  | Not detected                   |
| Unspecified Impurity                                | 0.1% Max  | 0.06%                          |
| Total impurity                                      | 1.5% Max  | 0.63%                          |
| <b>Microbiology Control</b>                         |   |                                |
| Total plate count                                   | 1,000cfu/g Max                                  | <10cfu/g                       |
| Yeast & Mold  | 100cfu/g Max                                    | <10cfu/g                       |
| E. Coli   | Negative/g Max                                  | Negative/g                     |
| Salmonella  | Negative/10g Max                                | Negative/10g                   |
| <b>Conclusion: Complies with the specification.</b> |   |                                |