KÄÄPÄ BIOTECH



# NORDIC REISHI ORGANIC EXTRACT POWDER

## **Product Information**

**Description:** 

Country of Origin: Certifications: Extraction:

Compounds of Interest: Particle size:

## Materials used

Mushroom:

Extraction solvents: Origin of raw materials: Extract powder made from 100% Reishi (*Ganoderma lucidum*) fruiting bodies. Extract powder includes spray dried extract powder with the mushroom fiber. Finland EU/USDA certified organic Made bioavailable through Ultrasonic Assisted Extraction in hot water NLT 32% *Beta-glucans* 180 microns

Reishi fruiting bodies Botanical: *Ganoderma lucidum* **Only mushroom fruiting bodies used** Water Reishi: Finland Purified water: Finland

# Mushroom growing medium

Substrate:Birch sawdustCertification:Organic & PEFC or FSC certifiedSource:Finland

# **Processing & Extraction**

Processing of mushrooms:

**Ultrasonic Assisted Extraction:** 

Drying Reishi fruiting bodies, grinding, Ultrasonic Assisted Extraction, filtering, 3rd party lab testing Through ultrasonication, the mushroom (chitin) cell walls are broken in order to increase bioavailability of compounds. Ultrasonic assisted water and alcohol extraction guarantees that our mushroom extracts have the full spectrum of bioactive compounds.<sup>1</sup> Finland, KÄÄPÄ Headquarters

Manufacturing location:

### Certificates

Organic certifying body:

Finnish Food Authority & USDA

<sup>&</sup>lt;sup>1</sup> <u>https://www.sciencedirect.com/topics/biochemistry-genetics-and-molecular-biology/ultrasound-assisted-extraction</u>

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# **Quality Control**

#### Microbiological range:

Total count of colony forming units (CFU)	< 20000 cfu/g at 30 °C
Mold & Yeast	< 1000 cfu/g
E.Coli	< 100 cfu/g
Salmonella	Negative/10g

#### Heavy metal range:

Arsenic	< 1.0 ppm
Cadmium	< 2.0 ppm
Mercury	< 0.1 ppm
Lead	< 1.0 ppm

Analytical values:

Batch specific microbiological and heavy metal analysis provided upon request.

# **Overview of Reishi**

#### Reishi (Ganoderma lucidum) is possibly the most popular functional mushroom on the planet.

Reishi's calming effects are renowned. It has been used for restlessness, insomnia and palpitation in Asia for hundreds of years. Studies have shown that Reishi extract significantly increased total sleep time and non-rapid eye movement (NREM) sleep.<sup>2</sup>

# **Compounds of Interest**

**Beta-Glucans** 

Assay: NLT 32%

<sup>&</sup>lt;sup>2</sup> https://www.sciencedirect.com/science/article/abs/ pii/S0378874111008981





#### **Bioavailable Compounds**

- Triterpenes
- β-(1,3)-(1,6)-D-glucans
- Ganoderic acid
- Ganodermic acid

#### **Potential benefits**

- Protect against oxidative stress<sup>3</sup>
- Reduce inflammation<sup>4</sup>
- More restful night sleep<sup>5</sup>
- Fighting fungal overgrowth<sup>6</sup>

# Nordic Mushrooms

Why is it important to know where your mushrooms come from? KÄÄPÄ Biotech controls the Nordic Mushrooms process from *spore to shipment*: Quality, transparency and product safety are everything when it comes to medicinal mushroom extracts.

**Nordic Mushrooms certificate guarantees** you and your customers that the mushrooms have grown in a pure environment and that only fruiting bodies were used in the process. Through our Extraction 2.0 we make the *Compounds of Interest* bioavailable.

Nordic Mushrooms stands for an honest and potent

mushroom extract.

<sup>&</sup>lt;sup>3</sup> <u>https://link.springer.com/article/10.1007/s11010-017-3053-6</u>

<sup>&</sup>lt;sup>4</sup> https://www.ncbi.nlm.nih.gov/pubmed/25271985

<sup>&</sup>lt;sup>5</sup> <u>https://pubmed.ncbi.nlm.nih.gov/22207209/</u> <sup>6</sup> <u>http://www.dl.begellhouse.com/journals/708ae68d64b17c52,5b711a741ddf87a8,36329d351ccba418.html</u>