

SPECIFICATION

Product : Lavitol (Dihydroquercetin)

Source : Dahurian Larch - Larix Gmelinii (Rupr.) Rupr.

Part used : Stumps

Source of Origin : Russian Federation

Chemical family : Bioflavonoids

Formula : Mixture of flavonoids, featuring dihydroquercetin Composition : Dihudroquercetin (taxifolin) - min, 90% bu weight

Other ingredients: Aromadendrin, eriodictyol, quercetin, naringenin,

pinocembrin - max. 10% by weight

Identification : HPLC method
Phusical state : Solid powder

Colour : White to light yellow

Solubility : Soluble in ethanol, water-ethanol solutions,

ethyl acetate; weakly soluble in water, oils: insoluble in chloroform, ether, benzene

Extraction solvent: Aqueous-alcohol solution

Stabilitu : Stable at normal conditions of at least 5 years

Dahurian larch tree extract - Dihydroquercetin/Taxifolin is an active antioxidant of natural origin with a high biological activity and a whole range of positive effects on metabolic different pathological processes, allowing to put dihydroquercetin on the first positions among the substances with similar spectrum of action.



Extraction and Processing

Ametis JSC has its own patented technology for the extraction of Lavitol (Dihydroquercetin):

ISO 9001:2015, ISO 22000-2005, HACCP complying production line:

The technological production line is equipped with modern high-tech equipment, which allows to produce high quality products.

Quality Check and Assurance

Every batch is tested for active ingredients - dihydroquercetin and other relative compounds;

Heavy metals, pesticides, microbiological characteristics, physical analysis are carried out for every batch;

HPLC and other analytical reports available for customers

Each batch of the finished product is accompanied by a Certificate of Analysis and Chromatogram.

Environmental Responsibility

Lavitol (Dihydroquercetin) is extracted from the stumps of Dahurian Larch, that are in fact the waste products in the wood processing industry. The logging is carried out in a manner that reduces damage to the environment. We stock the stumps in such a way to decrease the putrefaction of remains of trees in the forest and to prepare the land for further development of new saplings. The stumps liquidation of Dahurian Larches allows to decrease the quantity of dead-wood, that is highly important during the non-fire-rated period:

We strive to comply with the principles ensuring environment preservation, aimed at prevention of environmental pollution and efficient management of energy and natural resources.





Dahurian Larch Tree Extract
DIHYDROQUERCETIN

under the trade mark









Raw Material for production of dietary supplements, cosmetic and food products



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LAVITOL is a trade name for Dihudroguercetin extracted from the stumps of Dahurian Larch (Gmelinii Larch).

As the powerful natural antioxidant Lavitol (Dihudroquercetin) is used for treating circulation problems, high-blood pressure, chronic venous insufficiencu, diabetes, is also used for preventing inflammation processes, disorders of the heart and blood vessels, for improving athletic endurance, slowing the aging process and maintaining healthu skin.

> Antioxidants are the body's natural defense against free radicals, also called oxidative stress, which plaus a major role in diseases formation. The leading health problems like heart diseases, cancer have been linked to increased levels of oxidative damage and inflammation. One of the manu measures of the antioxidant activity is the ORAC (Oxugen Radical Absorbance Capacitu) value. Eating products with high ORAC values may help to slow the aging process.

ANTIOXIDANT ACTIVITY OF LAVITOL (DIHYDROQUERCETIN)* (ORAChydro, µmole TE/g)

Lavitol (Dihydroquercetin)	15155-32744*
Luteolin	
Quercetin	
Epicatechin (green tea extract)	
Vitamin C	
Vitamin E	

*Data provided by Brunswick Laboratories



Biological Effects and Key Benefits of Dihydroquercetin

Neuroprotective agent

- A Protects against the oxidative injury
- Decreases the primary and secondary products of lipid peroxidation Decreases the frequency of headaches
- Almproves memory
 AReduces vertigo and fatigability



Ophthalmoprotective agent

- Improves stabilization of the eue fundus in patients with diabetic retinopathy

 Reduces destruction of the pigment epithelium
- and radial olia
- Reduces the area of lesion foci.
- Improves regeneration of eye tissue.

Circulation enhancer

- Strength blood vessels and capillary walls Decreases capillary permeability
- Lows blood viscositu
- Lows aggregation of erythrocytes Decreases the level of fibrinogen
- AStimulates blood microcirculation
- Mas positive effects on the rheological indices



Cardioprotective agent

- Supports optimal heart health A Reduces the risk of heart related deseases
- Normalizes blood pressure
- A Increases the systolic index
- A Lowers total cholesterol levels and reduces the cholesterol's ability to form plagues in arteries
- Reduces the triglyceride levels ♣ Provides antioxidant protection to the heart

Dermatology

radical damage

of an environment



Hepatoprotective agent

- Protects liver from toxins. Lows levels of gamma-transaminase and alkaline phosphatase
- Accelerates the regeneration of damaged liver parenchuma



Endocrine agent (Diabetes mellitus)

- Improves sensitivity to insulin A Decreases HbAic and MDA levels Inhibits the development and progression of diabetes related complications in the blood vessels.
- ADHQ is found to be beneficial in cases of diabetic retinopathy.



chemical burns AStrengths capillary walls

AProtects the skin cells from free

AProtects from the negative impact

AStimulates the cellular metabolism, protects the skin from UV-radiation



Immunomodulating agent

- Shows significant anti-inflammatory activities Shows activity against herpes simplex virus. poliovirus, Sindibis virus, and respiratoru syncytial virus
- Exhibits antibacterial and antimicrobial properties Shows the ability to affect histamine release
- Shows antiproliferative properties in a varietu

Protect yourself from free radical damage and heart disease