**General idea:**

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| **PROPOLIS** | **PRODUCT** | **SORE THROAT** |
| What is Propolis? | Indications | Symptoms |
| History | Variants | Causes |
| Properties | Active ingredients | Self-care tips |
| Standardization | Benefits |  |
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**PROPOLIS**

**What is Propolis?**

Propolis is a resinous substance produced by bees. It is collected by bees from young shrubs, leaves and most of all exudates of the buds of selected trees. After adding some enzymes to what has been collected we have then proper propolis dubbed also as bee glue.

In Europe propolis has been known for centuries as nature’s most unique substance with various medicinal properties.

**History**

The ancient Greeks, Romans, and Egyptians were aware of the healing properties of propolis and made extensive use of it in medicine. Ancient Greek texts refer to the substance as a "cure for bruises and suppurating sore", and in Rome propolis was used by physicians in making poultices. In Ancient Egypt, since earliest times the gods were associated with the bee and one of the pharaons’ titles was “Bee King”.

In the last century scientists started to to examine this exquisite properties of propolis and its antibacterial, antiseptic, anti-inflammatory, antifungal, anesthetic, and healing properties have been confirmed. Propolis has been effectively used in treatment of dermatological, laryngological, and gynecological problems, neurodegenerative diseases, in wound healing, and in treatment of burns and ulcers. Modern applications of propolis have expanded into skin care, dental care, digestive health, immune support, and more. Propolis is highly beneficial for human health.

EUROPEAN TRADITION

The knowledge of medicinal properties of propolis survived in European traditional medicine. It is often used as a common cure for cold, sore throat and flu.

Propolis is a resinous substance produced by bees (apart from honey and bee jelly). It is collected by bees from young shrubs, leaves and exudates of the buds of selected trees.

**Properties**

Natural Bee Propolis is:

Antibacterial

Antiseptic

Anti-inflammatory

Antifungal

Anesthetic

Healing

In Europe:

it is known as ‘a natural antibiotic’.

is one of the most widely used substance in the treatment of infections

**Standarization**

It is phenolics and flavonoids that are responsible for propolis amazing properties.

Flavonoids, with various biological activities, are considered as key compounds in propolis.

For many years researchers tried to pin down and isolate from propolis a substance that could be linked to specific biological and therapeutical effects. A lot of research has been done on caffeic phenetyl ester (known as CAPE), caffeic acid, galangin, quercetin, hesperidin and tectochrysin. Researchers isolated these molecules and tested their bioactivity. Numerous assays confirmed that although individual molecules do have multidirectional biological activity - they are not as effective as the combination of them all - namely propolis*.*

Propolis, depending on the source may vary significantly in terms of composition and thus activity against bacteria and viruses.

Lack of content stability means problems with repeatable activity and properties. This is why propolis does not always act in the same manner. This feature is characteristic for all natural substances like plant extracts and honeybee products.

Standardization is a must to provide repeatable properties and activity of a natural ingredient.

**Standardization means repeatable content of active substances and constant properties**

**Propolis MS with Flavonoid Index**

Propolis MS standardization:

* many years of research and the advanced technological process
* highest, european standards of production

Our Propolis is characterized by high concetration of active fractions and repeated, high level of bioactivity. How do we achieve it? By highest, european standards of production and few important steps:

1. Only European suppliers! We’ve checked lots and lots of suppliers in order to provide the best quality. Our Propolis comes only from selected and validated suppliers. Every batch is provided with the certificate of geographical origin and bioactivity.
2. Only the most sophisticated extraction! Our Propolis is devoid of all waxes and proteins thus it has a pleasant taste and its biological activity remains unharmed.
3. Check the Phenolic Index! Poplar propolis has unique proportion of total phenolics to selected specific fractions of flavonoids which guarantees the highest activity against bacteria and fungi. Every batch of raw propolis is checked according to this index, and only the compliant ones are allowed in our production.

What do we get? Poplar propolis extract of confirmed origin and stable amount of most important substances and high level of biological activity.

Made by honeybees.

Standardized by professionals.

Developed by Eulab

**Bibliography**

*An in vitro study on antimicrobial activity of propolis from Mugla province of Turkey.*

Ugur A, Arslan T.

*Inhibitory effect of water-soluble derivative of propolis and its polyphenolic compounds on tumor growth and metastasizing ability: a possible mode of antitumor action.*  
Orsolic N, Sver L, Terzic S, Tadic Z, Basic I.

*Inhibitory effect of propolis on the growth of human leukemia U937.*  
Aso K, Kanno S, Tadano T, Satoh S, Ishikawa M.

*Chemical analysis and antimicrobial activity of greek propolis.*  
Melliou E, Chinou I.

*Effectiveness of an herbal preparation containing echinacea, propolis, and vitamin C in preventing respiratory tract infections in children: a randomized, double-blind, placebo-controlled, multicenter study.*  
Cohen HA, Varsano I, Kahan E, Sarrell EM, Uziel Y.

*In vitro antimicrobial activity of propolis and synergism between propolis and antimicrobial drugs.*  
Stepanovic S, Antic N, Dakic I, Svabic-Vlahovic M.

*Antibacterial activity of honey and propolis from Apis mellifera and Tetragonisca angustula against Staphylococcus aureus.*  
  
Miorin PL, Levy Junior NC, Custodio AR, Bretz WA, Marcucci MC.

*Effect of propolis on virulence factors of Candida albicans.*  
D'Auria FD, Tecca M, Scazzocchio F, Renzini V, Strippoli

*Flavonoids and trypanocidal activity of Bulgarian propolis.*  
Prytzyk E, Dantas AP, Salomao K, Pereira AS, Bankova VS, De Castro SL, Neto FR.

*Propolis and some of its constituents down-regulate DNA synthesis and inflammatory cytokine production but induce TGF-beta1 production of human immune cells.*  
Ansorge S, Reinhold D, Lendeckel U.

*Inhibition of Helicobacter pylori growth in vitro by Bulgarian propolis: preliminary report.*  
Boyanova L, Derejian S, Koumanova R, Katsarov N, Gergova G, Mitov I, Nikolov R, Krastev Z.

*Free radical scavenging activity of propolis.*  
Ichikawa H, Satoh K, Tobe T, Yasuda I, Ushio F, Matsumoto K, Endo K, Ookubo C.

*Antimicrobial activity of propolis samples from two different regions of Anatolia.*  
Kartal M, Yildiz S, Kaya S, Kurucu S, Topcu G.

*A clinical pharmacological study of the potential beneficial effects of a propolis food product as an adjuvant in asthmatic patients.*  
Khayyal MT, el-Ghazaly MA, el-Khatib AS, Hatem AM, de Vries PJ, el-Shafei S, Khattab MM.

*Phytochemical compounds involved in the anti-inflammatory effect of propolis extract.*Borrelli F, Maffia P, Pinto L, Ianaro A, Russo A, Capasso F, Ialenti A.

*Analytical methods for quality control of propolis.*  
Pietta PG, Gardana C, Pietta AM.

*Antioxidant activity of propolis: role of caffeic acid phenethyl ester and galangin.*  
Russo A, Longo R, Vanella A.

*The effect of herbal remedies on the production of human inflammatory and anti-inflammatory cytokines.*  
Barak V, Birkenfeld S, Halperin T, Kalickman I.

*Chemical composition of European propolis: expected and unexpected results.*  
Bankova V, Popova M, Bogdanov S, Sabatini AG.

*Egyptian propolis: 2. Chemical composition, antiviral and antimicrobial activities of East Nile Delta propolis.*  
  
Abd El Hady FK, Hegazi AG.

*Antitrypanosomal activity of Brazilian propolis from Apis mellifera.*  
da Silva Cunha IB, Salomao K, Shimizu M, Bankova VS, Custodio AR, de Castro SL, Marcucci MC.

*Effect of three vegetal sources of propolis on macrophages activation.*  
Lopes FC, Bankova V, Sforcin JM.

**PRODUCT**

**Indications**

Sore throat

Cough

Itchy throat

Hoarseness

* Weakened immunity system

**THROAT UNDER PROTECTION**   
CLAROSAN® is especially recommended in the autumn season and during rainy season, because of increased risk of infection, when the first symptoms of hoarseness or feeling of irritation or dryness of the mouth and throat appear.

There are many factors that contribute to the weakening of the immune system and eventually lead to viral infections and colds. The weakening of the body’s immune system, frequent variations in temperature, dryness of throat caused by the action of air conditioning and polluted air lead to throat infection. Being in a closed, poorly ventilated spaces, and large crowds of people, promote the spread of viruses that cause the common cold.

**Today's fast-paced lifestyles, too many duties and haste does not leave time for being ill, so you should increase immunity and act as early as the first sign of infection.**

Sucking lozenges support the body's resistance due to the content of vitamin C stimulates the protective barrier of our throat, provoking the release of larger amounts of saliva - our natural ally.

**Variants**

Packshots + size info

**Active ingredients**

CLAROSAN® contains:

• MS propolis - the proven origin and the optimal composition provides a constant level of bioactivity in each lozenge. Propolis has antibacterial, anti-inflammatory, anti-fungal, properties. It soothes pain, and strenghtens the immune system.

• Vitamin C - strengthens the body's natural immunity  
• Aloe Vera - soothes and moisturizes sore throat  
• Ginger - Reduces symptoms of sore throat and cold, moisturizes the mucus membranes  
• Lemon grass oil - soothes colds and soothes cough

**Benefits**

• Made exclusively from natural ingredients. In contrast to preparations containing antibacterial chemicals, CLAROSAN® does not dry the mucosa of the mouth and throat;  
• Propolis contained in lozenges acts locally and systemically.  
• The lozenges dissolve slowly, so that the mucous membrane of the mouth has prolonged contact with the active substances that are released from propolis;  
• There are no contraindications to the use of CLAROSAN® for children. \*

\*Over 6 years - all lozenges are a choking hazard for children 6 years and under.

**How to use**

Dissolve one lozenge slowly in the mouth every 2 to 3 hours. Do not exceed the stated dose.

**SORE THROAT**

**Symptoms**

Sore throats can be painful and annoying. Fortunately, most of them are caused by a minor illness and go away without medical treatment.

**Symptoms and signs of a sore throat include:**

* swollen tonsils
* enlarged and tender glands in your neck
* a painful feeling at the back of your throat
* discomfort when swallowing
* hoarseness
* dry throat
* itching

**Causes**

Several conditions can cause a sore throat:

* Viral infections
* Bacterial infections
* Irritants and injuries (smoking, air pollution, yelling or nasal drainage down the back of the throat, allergies)
* Throat irritation from air-conditioning.

**Self-care tips**

The tips below may help relieve the symptoms:

* Avoid food or drink that is too hot.
* Eat cool, soft food and drink cool or warm liquids.
* Avoid smoking and smoky environments.
* Regularly gargle with a mouthwash of warm, salty water to reduce any swelling or pain.
* Drink enough fluids, especially if you have a high temperature (fever).

If you have a sore throat that lasts for more than five to seven days, you should see your doctor.