

## Culic<sup>®</sup> Syrup 120mL

«Culic» syrup is an herbal syrup made from effective ingredients of «Licorice» plant root; with the scientific name of «*Glycyrrhiza glabra*». Since remote years up to date the Licorice in Chinese medicine, Iranian traditional medicine has been used as a good expectorant, anti-cough, and in the treatment of bronchitis, sore throat, common cold and influenza and also in modern herbal medicine these aspects are confirmed.

In «Culic» syrup in addition to the usage of effective ingredients «Licorice» root, the effective ingredients of «Thyme»; with the scientific name of «*Thymus vulgaris*» containing Thymol and Carvacrol that is good for the treatment of sputum and is known as a good anti-cough is used.

Also effective ingredients of «Anise» plant with the scientific name of «*Pimpinella anisum*» used as a scent and taste maker in «Culic» syrup that in addition to creating a good taste it has the same effects as the «Licorice» and «Thyme» treating the cough and the symptoms of common cold.

The usage of honey in «Culic» syrup in addition to the property of natural sweetening enriches the effects of this syrup in treating cough and sore throat.

### Main components:

Glycyrrhizin, Thymol and Carvacrol

### Indications:

Sore throat, cough, eliminating the symptoms of common cold, laryngitis, bronchitis, fever and influenza

### Administration & Dosage:

The adults and people over 12 years old: 3- 4 times per day, each time one spoonful (equal to 10 ml)

The people of 6-12 years old: 3- 4 times per day, each time one teaspoonful (equal to 5 ml)

To get better effect of this drug in laryngitis and sore throat, please don't drink water immediately.

### Side effects:

Usually the beginning, the graveness of interactions and side effects of Licorice depend on the dosage taken, duration of usage and the sensitivity of the individuals. The long period usage of the drugs containing Licorice (longer than 4-6 weeks) or the unpermitted over dose may cause the increase in blood pressure and the decrease in urination.

## **Contraindications:**

In patients having high blood pressure or coronary and heart disease, chronic hepatitis, cholestatic liver, cirrhosis of the liver, hypokalemia , renal failure, and in pregnancy the usage of this drug is contraindicate. The persons allergic to the plants used in this drug that the usage of this drug may cause their allergic reactions (of skin, intestinal, respiratory) they are to avoid taking this drug.

## **The usage in pregnancy and breast-feeding:**

The usage of this drug is not allowed during pregnancy and breast-feeding.

## **Packaging:**

This drug is presented in bottles of 120 mL, in boxes containing leaflets.

## **Remarkable points:**

- According to studies, licorice extract like drugs such as Pioglitazone and Rosiglitazone, with an effect on the PPAR-  $\gamma$  receptor, increases insulin sensitivity and decreases blood glucose levels. Therefore, reducing blood glucose levels can also be seen with «Culic» syrup. Therefore, «Culic» syrup should be used with caution in diabetic patients and taking into account other medications used.
- Proper storage temperature is 4-25 ° C.
- After opening the cap of the bottle, keep it in the temperature between 5-20 °C and close the cap tightly after each time of usage.
- Prevent it from freezing, high and low temperature.
- As the drug contains different plant effective ingredients some sediments may form or the color may get dull or some suspensions may appear in the bottle and these are not the signs indicating its disposal, only by shaking it well the content get an homogenous appearance and you may use it. It is recommended to shake the bottle well before use since even sometimes the sediments or suspensions are not visible and by shaking it the drug gets homogenous and the dosage will be maintained accordingly.
- Keep the drug away from reach of children.

**The name of «Culic» has been initiated from «Cu» (Cough) and the « Lic» herb (Licorice).**

# Culic<sup>®</sup> Syrup 120mL

## Specialized info:

Since very remote times up to now Licorice has been used as a medicinal herb and its products have been herbal medicine for treating sputum and healing intestinal wounds.

The Commission E\* has confirmed the use of Licorice root, Thyme and Anise for treating the cough, bronchitis and fever. Also the anti-fungi and anti-bacteria effects have been referred to it. As example, according to the researches carried out by different organizations such as PDR, this fact has been mentioned, the fennel components and other compounds available in Licorice have an antibacterial effect on staphylococcus aureus resistant to methicillin and the staphylococcus aureus sensitive to methicillin.

## Licorice:

The Glycyrrhizin available in Licorice stimulate the production of interferon Gama by T cells and as a result it reveals an anti-virus effect in viral infections. It is mentionable that there are several researches confirming the antiviral effects of Glycyrrhizin on the viruses of hepatitis type B, HIV, and CMV.

The extracts of Licorice carries out its anti-inflammatory effects by inhibit the activity of tyrosinase and inhibit of the production of «Superoxide Anion» and inhibit of cyclooxygenase activity.

According to the researches it has been proved that Glycyrrhizin by inhibit the activity of cyclooxygenase prevents the formation of prostaglandins (particularly  $PG_{E2}$ ), in addition to it, by the indirect inhibit of platelet aggregation, it has an influence on all the involved factors in inflammatory stages. The ingredients of Licorice reveals anti-inflammatory activity similar to steroids; that is they cause inhibit of phospholipase  $A_2$  (a necessary enzyme for inflammatory reactions).

Licorice has a protecting effect on intestinal wounds derived of aspirin and causes the increase of intestinal mucous secretion and on the other part it expedites the healing of intestinal ulcers.

## Thyme:

According to researches, the Thyme is one of the plants having the most effects on the bacteria generating respiratory diseases, and has anti-bacteria and anti-viral effect, in addition to this it has a good bronchitis anti-spasm effect and a good property in sputum healing and increases the generation of mucous secretion in bronchitis.

Thymol and Carvacrol are among the principal effective ingredients of Thyme and have anti-spasm and anti-cough effects and enrich the effect of this drug and cause the provoking of ciliary activity in respiratory tracts.

## Interactions:

- Licorice should not be used during long periods with Thiazides and loop diuretics and cardiac glycosides, since it causes the entangling of water and sodium and decreases the blood pressure diminishing effects of these drugs, also it should not be used when you are taking Spironolactone and Amiloride.
- Care should be taken not to use simultaneously this drug with anti-arrhythmic drugs because the Licorice available in it in long term may lead to hypokalemia.
- The use simultaneous of this drug with anti-coagulants drugs should be with care because the glycyrrhizin by inhibit the thrombin may increase the risk of bleeding.
- This drug should be used with care and under the prescription of the physician, when taking anti-diabetes, insulin, and combination contraceptives.

\* Because of the effective ingredients of the plants used in this drug and their gastrointestinal effects, this syrup is also suitable for gastritis and the prevention of intestinal ulcers.

For any more info, you might refer to the site of our company: [www.ktp.co.ir](http://www.ktp.co.ir) or send your email to: [info@ktp.co.ir](mailto:info@ktp.co.ir) or call us at 88390745.

## References:

- 1-USP 34
- 2-PDR 2010
- 3-Alternative Medicine Review, Volume 10, No.3, 2005
- 4-WHO Monograph
- 5-Martindale 35
- 6-Mintage Journal of Pharmaceutical & Medical Sciences, Vol 2, Issue 3, July-sep 2013
- 7-Regulatory Toxicology and Pharmacology 46(2006) 167-192
- 8-Iranian Herbal Pharmacope

The components of the product: Effective materials of Licorice, effective materials of Thyme, effective materials of Anise, honey, sorbitol, glycerin and benzoic acid.

\* Commission E is a governmental supervising Organization in Germany by the cooperation of experienced physicians and pharmacologists compiles and prints articles in the field of evaluating the immunity and the effectiveness of medicinal plants which have already been used in traditional and native medicine and is considered a prestigious international source.

**Know.Tech.Pharm is a knowledge base company, specialized in formulation and production of herbal medicine, located in Tehran University Science and Technology Park.**