

# LIVOSIL FORTE CAPSULE

## COMPOSITION

Each capsule of **Livosil Forte** contains:

Silymarin 140 mg

## PHARMACOLOGY

Silymarin is a complex mixture of four flavonolignan isomers, namely silybin, isosilybin, silydianin and silychristin. Among the isomers silybin is the major and most active component and represents about 60-70%, followed by silychristin (20%), silydianin (10%), and isosilybin (5%).

### Pharmacodynamics

Preclinical studies have shown that silymarin has multiple actions as a hepatoprotective agent. It acts by antioxidative, anti-lipid peroxidative, antifibrotic, anti-inflammatory, membrane stabilizing, immunomodulatory and liver regenerating mechanisms.

Though silymarin does not have antiviral properties against hepatitis virus, it promotes protein synthesis, helps in regenerating liver tissue, controls inflammation, enhances glucuronidation and protects against glutathione depletion. Silymarin is a useful drug for hepatoprotection in hepatobiliary diseases and in hepatotoxicity due to drugs. Silymarin has a good safety profile, better patient tolerability and is an effective drug.

### Pharmacokinetics

Silymarin is insoluble in water and is usually administered orally in an encapsulated form. It is readily absorbed from the gastro-intestinal tract. The peak plasma levels after an oral dose are achieved in 4-6 hours in experimental animals and in human beings. About 20-40% of the administered dose of silymarin is excreted in bile as sulphates and glucuronide conjugates. The clearance half-life of Silymarin is six to eight hours.

## INDICATIONS

- Acute and chronic viral hepatitis
- Alcoholic liver disease
- Fatty degeneration of liver [in Diabetics]
- Early stages of Liver cirrhosis
- Toxic and drug induced liver diseases
- *Amanita* mushroom poisoning
- Gallbladder disorders

## DOSAGE

The recommended dose of **Livosil Forte** is 1 capsule 2-3 times daily as required.

## CONTRAINDICATIONS

Hypersensitivity to any ingredient of this product.

## PRECAUTIONS

In theory, Silymarin may lower blood sugar levels. Caution is advised in patients with diabetes or hypoglycemia, and in those taking drugs that affect blood sugar. Serum glucose levels may need to be monitored.

## Pregnancy & Lactation

There are currently no adequate and well-controlled trials with Silymarin in pregnant and lactating women. **Livosil Forte Capsules** should be used only when clearly needed.

#### **DRUG INTERACTIONS**

There are no reported interactions between Silymarin and other medications. However the influence Silymarin has on liver function should be taken into account when other pharmaceutical drugs are given concomitantly.

#### **ADVERSE EFFECTS**

Silymarin is reported to have a very good safety profile. Both animal and human studies showed that silymarin is non-toxic even when given at high doses (>1500 mg/day). However, a laxative effect is noted at these doses, which may be due to increased bile secretion and bile flow.

Other commonly noted adverse effects are: bloating, dyspepsia, nausea and irregular stools. Silymarin may also cause an allergic reaction in some individuals, particularly those with known allergies to plants in the Asteraceae family (thistles, daisies, artichokes). No other widely reported side effects are known when Silymarin is taken in proper therapeutic dosages.

#### **PRESENTATION**

Blister of 10 capsules

#### **STORAGE**

Store in a cool, dry and dark place.