SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

CYPRO B PLUS SYRUP
(Cyproheptadine Fortified with Vitamin B Complex Syrup)

Strength

Composition:
Each 5 ml contains:

Cyproheptadine Hydrochloride USP	2.0 mg
Thiamine Hydrochoride (Vitamin B1) BP	1.0 mg
Riboflavin (Vitamin B2)	0.5 mg
Pyridoxine Hydrochloride (Vitamin B6)	0.5 mg
Niacinamide BP	10 mg
Cyanocobalamin (Vitamin B12) BP	1 mcg
Approved colour used	Q.S
Flavoured Base	Q.S
Appropriate overages of vitamin are added	Q.S

Pharmaceutical form

Oral liquid preparation (Syrup)

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 5 ml contains:

Cyproheptadine Hydrochloride USP	2.0 mg
Thiamine Hydrochoride (Vitamin B1) BP	1.0 mg
Riboflavin (Vitamin B2)	0.5 mg
Pyridoxine Hydrochloride (Vitamin B6)	0.5 mg
Niacinamide BP	10 mg
Cyanocobalamin (Vitamin B12) BP	1 mcg
Approved colour used	Q.S
Flavoured Base	Q.S
Appropriate overages of vitamin are added	Q.S

For the full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM

Oral liquid preparation (Syrup)
Yellow coloured, clear syrupy liquid having Mixed Fruit flavour.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

CYPRO B PLUS SYRUP.

Cyproheptadine Hydrochloride is a Histamine H1 receptor antagonist; antihistamine indicated for the treatment of various allergic symptomatologies-including dermatographia, rhinitis, conjunctivitis, and urticaria – as well as adjunctive therapy in the treatment with epinephrine. It is white or slightly yellow, crystalline powder. Cyproheptadine hydrochloride is slightly soluble in water, freely soluble in methanol, sparingly soluble in ethanol.

Thiamine Hydrochloride (Vitamin B1) BP is used in combination with other B vitamins, and is found in many vitamin B complex products. People take thiamine for conditions related to low levels of thiamine, including beriberi and inflammation of the nerves (neuritis).

Riboflavin (Vitamin B2) is used in the treatment of oxidative stress and inflammation of nerves, which are contributors to migraine headaches. The vitamin is also needed for normal mitochondrial activities; migraines are sometimes caused by mitochondrial abnormalities in the brain.

Pyridoxine HCL is a vitamin and a medication used to treat vitamin B6 deficiency and the management of nausea and vomiting during pregnancy. It is also used in vitamin B6 dependency syndromes and controversially used in some other disorders and will degrade slowly when exposed to light.

Niacinamide is used in the treatment of vitamin B3 deficiency and related conditions such as pellagra. It is also used for acne, diabetes, cancer, osteoarthritis, aging skin, skin discoloration, and many other conditions, but there is no good scientific evidence to support most of these uses.

Cyanocobalamin (Vitamin B12) is used to prevent and treat low blood levels of this vitamin. Most of this vitamin.. Vitamin B12 is important to maintain the health of your metabolism, blood cells, and nerves. Serious vitamin B12 deficiency may result in a low number of red blood cells (anemia), stomach/intestine problems, and permanent nerve damage.

4.2 Posology and method of administration

Posology

Children (2 to 6 years): 2.5 ml to 5 ml to be given 2 to 3 times a day or as directed by the Physician.

Children (7 to 12 years): 10 ml to be given 2 to 3 times a day or as directed by the Physcican.

Adult & children (above 12 years): 10 ml to be taken 3 times a day or as directed by the physician Liquid for oral administration.

Method of administration: Oral

4.3 Contraindications

CYPRO B PLUS SYRUP is contraindicated in:

- Patients undergoing therapy for an acute asthamatic attack;
- Newborn or Premature Infants; so this drug is not giving to new born or premature infants.
- Breast-feeding mothers;
- Patients with known sensitivity to cyproheptadine hydrochloride or drugs with similar chemical structure;
- Elderly, debilitated patients;
- Bladder neck obstruction;
- Monoamine oxidase inhibitor therapy;

4.4 Special warnings and precautions for use

- The safety and efficacy of CYPRO B PLUS SYRUP is not established in children under 2 years old.
- Antihistamines may diminish mental alertness; conversely, particularly in the young child, they may occasionally produce excitation
- Because CYPRO B PLUS SYRUP has an atropine-like action, individuals with a history of bronchial asthma, elevated intraocular pressure, hyperthyroidism, cardiovascular illness, or hypertension should use it with caution.
- Antihistamines may have additive effects with alcohol and other CNS depressants, e.g., hypnotics, sedatives, tranquilizers, antianxiety agents.

4.5 Interaction with other medicinal products and other forms of interaction

4.5.1 General information

MOA inhibitor prolong and intensify the anticholinergic effects of antihistamines. Antihistamines may have additives effects with alcohol and other CNS depressants, e.g., hypnotics, sedatives, tranquilizers, antianxiety agents.

Pyridoxine may increase the peripheral metabolism of levodopa, reducing therapeutic efficacy of the latter drug. Therefore, patients with Parkinson's diseases who are receiving treatment with plain levodopa should not take vitamin B6 in doses which greatly exceed the daily requirement. This dose not apply when levodopa is combined with a peripheral decarboxylase inhibitor.

4.5.1 Paediatric population

No interaction studies have been carried out in the pediatric population

4.6 Fertility, pregnancy, and lactation

Fertility

Cyproheptadine had no effect on fertility in a two-litter study in rats or a two generation study in mice at about 10 times the human dose.
Cyproheptadine did not produce chromosome damage in human lymphocytes or fibroblasts in vitro; high doses (10-4M) were cytotoxic.
Cyproheptadine did not have any mutagenic effect in the Ames microbial mutagen test; concentrations of above 500 mcg/plate inhibited bacterial growth.

Pregnancy

The use of any drug in pregnancy or in women of child-bearing age requires that the potential benefit of the drug should be weighed against possible hazards to the embryo and fetus.
Reproduction studies have been performed in rabbits, mice, and rats at oral or subcutaneous doses up to 32 times the maximum recommended human oral dose and have revealed no evidence of impaired fertility or harm to the fetus due to Cyproheptadine.
Cyproheptadine has been shown to be fetotoxic in rats when given by intraperitoneal injection in doses four times the maximum recommended human oral dose.
Two studies in pregnant women, however, have not shown that Cyproheptadine increases the risk of abnormalities when administered during the first, second and third trimesters of pregnancy.
No teratogenic effects were observed in any of the newborns. Nevertheless, because the studies in humans cannot rule out the possibility of harm, Cyproheptadine should be used during pregnancy only if clearly needed.

Breastfeeding

It is not known whether CYPRO B PLUS SYRUP is excreted in human milk, and because of the potential for serious adverse reaction in breast-feeding infants from 'CYPRO B PLUS SYRUP', a decision should be made whether to discontinue breast-feeding or to discontinue the drug, taking into accounts the importance of the drug to the mother.

4.7 Effects on ability to drive and use machines

This product may cause drowsiness and somnolence. Patients receiving it should not drive or operate machinery unless it has been

shown that their physical and mental capacity remains unaffected.

4.8 Undesirable effects

a. Summary of the safety profile

The most commonly reported adverse reactions are drowsiness and somnolence. Many patients who initially complain of drowsiness may no longer do so after the first three to four days of continuous administration.

Side effects reported with antihistamines are:

Blood and lymphatic system disorders: Haemolytic anaemia, leucopenia, agranulocytosis, thrombocytopenia

Immune system disorders: Allergic manifestation of rash and oedema, anaphylactic shock

Metabolism and nutrition disorders: Anorexia, increased appetite

Psychiatric disorders: Confusion, restlessness, excitation, irritability, nervousness, insomnia, aggressive behaviour, hallucinations, hysteria and euphoria

Nervous system disorders: Sedation, sleepiness (often transient), dizziness, disturbed coordination, tremor, paraesthesiae, neuritis, convulsions, faintness, headache.

Eye disorders: Blurred vision, diplopia

Ear and labyrinth disorders: Acute labyrinthitis, tinnitus, vertigo

Cardiac disorders: Palpitation, tachycardia, extrasystoles

Vascular disorders: Hypotension

Respiratory, thoracic and mediastinal disorders: Thickening of bronchial secretions, dryness of nose and throat, tightness of chest and wheezing, nasal stuffiness, epistaxis Gastrointestinal disorder: Dryness of mouth, epigastric distress, nausea, vomiting, diarrhoea, constipation

Hepato-biliary disorders: Cholestasis, hepatic failure, hepatitis, hepatic function abnormality, jaundices

Skin and subcutaneous tissue disorders: Urticaria, photosensitivity, excessive perspiration.

Renal and urinary disorders: Frequency and difficulty of micturition, urinary retention

Reproductive system and breast disorders: Early menses General disorders and administration site conditions: Fatigue, rigors

Investigations: Weight gain

Reporting of suspected adverse reactions:

Reporting suspected adverse reactions after authorisation of the medicinal product is important as it allows continued monitoring of the benefit–risk balance of the medicinal product. Healthcare professionals are requested to report any suspected adverse reactions to the marketing authorisation holder or, where applicable, via the

national reporting system.

4.9 Overdose

Adverse events experienced in higher than recommended doses were similar to those seen at normal doses. In the event of over dosage, general symptomatic and supportive measures are indicated as required.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Cyproheptadine hydrochloride is a serotonin and histamine antagonist with anticholinergic and sedative effects. Antiserotonin and antihistamine drugs appear to compete with serotonin and histamine, respectively, for receptor sites. The inhibitory effect of cyproheptadine in histamine-induced gastric secretion is also unusual as specific anti-histamines do not influence this effect. B-complex Vitamin The vitamin B-complex comprises a group of water-soluble factors more or less closely associated in their natural occurrence. It is known that nearly every vitamin of the B-complex forms part of a co-enzyme essential for the metabolism of protein, carbohydrate or fatty acid.

5.2 Pharmacokinetic properties

Cyproheptadine Hydrochloride

After a single 4 mg oral dose of 14C-labelled cyproheptadine hydrochloride in normal subjects given as Syrup or syrup, 2 to 20% of the radioactivity was excreted in the stools. Only about 34% of the stool radioactivity was unchanged drug, corresponding to less than 5.7% of the dose. At least 40% of the administered radioactivity was excreted in the urine. No significant difference in the mean urinary excretion exists between the tablet and syrup formulations. No detectable amounts of unchanged drug were present in the urine of patients on chronic 12-20 mg daily doses of Periactin syrup.
The principlemetabolite found in human urine has been identified as a quaternary ammonium glucuronide conjugate of cyproheptadine. Elimination is diminished in renal insufficiency.

Vitamin B1 (Thiamine)

Thiamine is absorbed from the gastro-intestinal tract and is widely distributed to most body tissues. Amounts in excess of the body's requirements are not stored but excreted in the urine as unchanged thiamine or its metabolites.

Vitamin B2 (Riboflavin)
Riboflavin is absorbed from the GI tract and in the circulation is bound to plasma proteins. Although widely distributed, little is stored in the body, and amounts in excess of requirements are excreted in the urine. Thiamine is absorbed from the GI tract and is widely distributed to most body tissues. It is not stored to any appreciable extent in the body and amounts in excess of requirements are excreted in the urine as unchanged thiamine or metabolites.

Vitamin B6 (Pyridoxine)
Pyridoxine is absorbed from the GI tract and is converted to the active form pyridoxal phosphate. It is excreted in the urine as 4-pyridoxic acid.
Nicotinamide (Nicotinic Acid Amide)
Nicotinamide is readily absorbed from the GI tract following oral administration and is widely distributed in the body tissues. Small amounts of nicotinamide are excreted unchanged in urine following therapeutic doses, however, the amount excreted unchanged is increased with larger doses

Vitamin B12 (Cyanocobalamin)
Cyanocobalamin is absorbed from the gastro-intestinal tract and is extensively bound to specific plasma proteins. A study with labelled Vitamin B12 showed it was quickly taken up by the intestinal mucosa and held there for 2 - 3 hours. Peak concentrations in the blood and tissues did not occur until 8 - 12 hours after dosage with maximum concentrations in the liver within 24 hours. Cobalamins are stored in the liver, excreted in the bile and undergo enterohepatic recycling. Part of a dose is excreted in the urine, most of it in the first eight hours.

5.3 Preclinical safety data
Not applicable.

6. PHARMACEUTICAL PARTICULARS
6.1 List of excipients
Sodium Methyl Paraben BP, Sodium Propyl Paraben BP, Sodium Benzoate BP, Citric Acid BP (Monohydrate), Disodium EDTA BP, Sucrose BP, Propylene Glycol BP, Sodium Saccharin BP, Sodium Hydroxide BP, Sodium Metabisulphite BP, Colour Ponceau 4R, Mix Fruit M-3432 Flavour, and Purified Water.

6.2 Incompatibilities

None reported.

6.3 Shelf life

24 months from the date of manufacturing.

6.4 Special precautions for storage

Store below 30°C in a cool dry place
Protect from Light
Keep out of reach of children
Replace cap tightly after use.
Shake well before use

6.5 Nature and contents of the container

200 ml Amber colour Round Brute Type pet bottles with Cap and measuring cup packed in a Carton along with the Pack Insert.

6.6 Special precautions for disposal <and other handling>

No special requirements

7. MARKETING AUTHORIZATION HOLDER AND MANUFACTURING SITE ADDRESSES

MANUFACTURING SITE ADDRESSES:

ENICAR PHARMACEUTICALS PVT. LTD
J-214, 215,216, M.I.D.C., Tarapur, Boisar,
Dist Palghar 401 506.
Ph. - +91-2525-279918 / 19 Fax - +91-2525-273523

MAH:
GALAXY PHARMACEUTICAL LTD
PO BOX 39107-00623, NAIROBI, KENYA

8. MARKETING AUTHORIZATION NUMBER

H2017/CTD2851/165

9. DATE OF FIRST <REGISTRATION> / RENEWAL OF THE <REGISTRATION>

5TH MAY 2017

10. DATE OF REVISION OF THE TEXT

JAN 2026