

HEMOFORCE

TM

PLUS ZINC

Sodium Feredetate, Folic Acid, Vitamin B12 and Mineral Syrup

Composition: Each 5ml of Syrup contains:

Sodium Feredetate BP Eq. to Elemental Iron 11mg, Folic Acid BP 0.5mg, Cyanocobalamin BP 5mcg, Zinc Sulphate Heptahydrate BP Eq. to Elemental Zinc 3.33mg, Manganese Sulfate USP Eq. to Manganese 3.25mcg, Copper Sulphate Pentahydrate BP Eq. to Elemental Copper 2.54mcg, Ascorbic Acid USP 100mg, Syrup Base q.s.

Color: Caramel.

Flavor: Anise RS, Mixed Fruit & Orange RSV.

Excipients: Liquid Glucose USPNF, Sucrose BP, Sodium Methyl Hydroxybenzoate BP, Sodium Propyl Hydroxybenzoate BP, Sodium Hydroxide BP, Sodium Chloride BP & Liquid Sorbitol (Non-crystallising) BP 70%.

Pharmacological Category: Hemoforce Plus Zinc Syrup is a haematinic preparation containing Iron, Folic acid, Vitamin B12, Zinc with trace elements.

Pharmacological Action: Hemoforce Plus Zinc, as a haematinic, increases the level of haemoglobin and the number of red blood cells. Vitamin B12 and Folic acid help in the synthesis of haemoglobin. Folic acid is active in the maturation of erythrocytes. Zinc directly controls many important processes in the body by maintaining the appropriate state of enzymes in the organs and cells. Zinc, being an important mineral plays a vital role for the protein synthesis and helps in regulation of the cells production in the immune system of the human body. Zinc is one of the most important trace elements necessary for the synthesis of proteins, DNA formation, and the replication of the genetic material which is transferred during cell division and cell growth. Ascorbic acid helps in absorption of Iron.

Therapeutic Indications: Hemoforce Plus Zinc Syrup is indicated in Iron Deficiency Anemia.

Contraindications: Hemoforce Plus Zinc is contra-indicated in patients with hemochromatosis, hemosiderosis, in the presence of intestinal diverticula or any intestinal obstruction. Iron is contraindicated in patients receiving repeated blood transfusions. Oral iron preparations are contraindicated when used concomitantly with parenteral iron therapy.

Dosage: Adults: 5ml 2-3 times a day.

Pharmacokinetics: Sodium feredetate contains iron in an un-ionised form. In this compound the iron is "insulated" or "sequestered" with the sodium salt of ethylenediamine tetra-acetic acid (EDTA) to form a chelate. Studies using radioactive tracers have shown that the iron chelate is split within the gastro-intestinal tract, releasing elemental iron which is absorbed and rendered available for haemoglobin regeneration. Iron absorption is enhanced in iron-deficiency states. Post-absorption distribution of elemental iron is as follows: 60% to 70% is incorporated into haemoglobin and

most of the remainder is present in storage forms, either as ferritin or haemosiderin, in the reticulo-endothelial system and to a lesser extent, hepatocytes. A further 4% is present in myoglobin and haeme-containing enzymes, or bound to transferrin in plasma. Excretion is mainly in the faeces. EDTA passes through the body unchanged. The compound is poorly absorbed, and that which reaches the bloodstream is eliminated by both glomerular filtration and tubular excretion. Folic Acid: Onset of action 0.5-1 hour. Rapidly absorbed mainly from the duodenum and jejunum. Extensively bound to plasma protein. Principal site of storage is the liver. It is also concentrated in the CSF and enters the breast milk. Undergoes conversion in the plasma and liver to the metabolically active 5-methyltetrahydrofolate. Excreted via urine as unchanged drug and metabolites. Vitamin B12: Oral absorption & plasma protein binding is dose dependent. Zinc absorption is concentration dependent and occurs throughout the small intestine. Zinc administered is absorbed efficiently (60-70 percent) & is lost from the body through the kidneys, skin, and intestine.

Adverse Reactions: Upper abdominal discomfort, nausea, metallic taste, heartburn, constipation or diarrhea, pallor, polycythemia vera, itching, transitory exanthema. Hypersensitivity to any of the ingredients. May aggravate acute Intestinal inflammatory disease.

Warning & Precautions: Hemoforce Plus Zinc should be taken under medical supervision during pregnancy & lactation.

Drug Interactions: Iron preparations interact with diphosphanates, antacids & tetracyclines. Concurrent use of phenytoin and folic acid may result in decreased phenytoin effectiveness. Biguanides, aspirin, potassium supplements, cholestyramine, colchicines, neomycin and anti-convulsant drugs have been found to impair Vitamin B12 absorption.

Symptoms of Overdosage & Treatment: Initial symptoms of iron over dosage include nausea, vomiting, diarrhoea, abdominal pain, haematemesis, rectal bleeding and lethargy. Severe overdose can cause side effects, including pallor, drowsiness, abdominal pain, internal bleeding and circulatory collapse. Seek immediate medical attention if these symptoms occur. Untreated overdose can lead to shock and coma. High blood glucose levels, called hyperglycemia and metabolic acidosis can also occur. Over dosage with Vitamin B12 results in a bright yellow discoloration of the urine. Treatment is supportive & symptomatic.

Storage Conditions: Do not store above 30°C. Protect from sunlight. Keep out of reach of children.

Presentation: Hemoforce Plus Zinc is available in a 200ml Bottle.