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## Actiferon SNDS Tablets: Slow release iron tablets, easy to swallow and easy on stomach.

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### ABSTRACT

Actiferon SNDS Tablet is a dietary supplement, primarily used to manage anaemia caused due to low levels of Vitamin B12 and folic acid. Essential nutrients, responsible for the formation of red blood cells and helps in carrying oxygen throughout the body. It also helps in managing ailments associated with anaemia including fatigue, exhaustion and weakness. It is primarily used to manage anaemia caused due to low levels of Vitamin B12 and folic acid levels in the body. Supports the formation of healthy red blood cells which helps carry oxygen throughout the body and maintains cellular energy. Manages ailments associated with anaemia including fatigue and exhaustion. Helps maintain a healthy nervous system and manages ailments associated with diabetic neuropathies. The present paper Reviews the Role of Actiferon SNDS Tablets developed by R&D cell of Lactonova Nutripharm Pvt Ltd. Hyderabad in managing ailments associated with anaemia including fatigue, exhaustion and weakness.

**Keywords:** Actiferon SNDS Tablets, Anaemia , fatigue, exhaustion, weakness.

### INTRODUCTION

Since Iron absorbed from the diet is inadequate to meet requirement of many individuals, so iron supplementation is essential to control iron deficiency anaemia. Actiferon

slow release iron tablets are easy to swallow and easy on your stomach. Actiferon rich in iron combines complete folic acid and physiologically active Cyanocobalamin and zinc in Actiferon in delayed release form avoiding the inhibition of iron absorption.

### COMPOSITION

Supplement Facts		
Serving per size : 1 Tablet		Serving per pack : 30
Each tablet contains :		ICMR RDA*
Emulsified Ferric Pyrophosphate		
Equivalent to Elemental Iron	35 mg	100%
Cyanocobalamin	1.2 mcg	100%
Dietary Folate (as L-Methylfolate Calcium)	500 mcg	100%
Pyridoxal-5 Phosphate	2.5 mg	100%
Zinc	12 mg	100%

\* Indian Council of Medical Research Recommended Daily Allowances.

**Ingredients:** Emulsified Ferric Pyrophosphate, Cyanocobalamin, L-Methyl Folate Calcium, Pyridoxal-5 phosphate, Zinc sulphate, Dibasic calcium phosphate [341(ii)], Microcrystalline cellulose [460(i)], Povidone [1201], Silicon Dioxide, [551], Talc [553(iii)], Hydroxypropylmethylcellulose [464], Magnesium Stearate [470(iii)], Ethyl Cellulose [462], Mica, Titanium Dioxide [171], Iron Oxide Black [172(i)], Propylene glycol [1520].

CONTAINS PERMITTED NATURAL COLOURS [171, 172(i)].

Ferric pyrophosphate is an iron replacement product. Free iron presents several side effects as it can catalyze free radical formation and lipid peroxidation as well as the presence of interactions of iron in plasma. The ferric ion is strongly complexed by pyrophosphate.<sup>1</sup> It presents an increasing interest as this insoluble form can be milder in the gastrointestinal tract and present higher bioavailability. Ferric pyrophosphate is intended to be indicated for the treatment of iron loss or iron deficiency as a formulation with a milder gastrointestinal effect.

Iron deficiency appears when the dietary intake does not meet the body's requirement or when there is chronic external blood loss. During acute blood loss, body iron stores are sufficient for accelerated erythropoiesis and restoration of iron homeostasis. But when the altered homeostasis remains for weeks to months then some supplement is needed. Some causes of iron deficiency include ectoparasitism, endoparasitism, hematuria, epistaxis, hemorrhagic skin, coagulopathy, thrombocytopenia, thrombocytopathia and gastrointestinal hemorrhage.

Iron supplementation typically results in increases in serum iron, transferrin-bound iron, and iron-stored in the form of ferritin in hepatocytes and macrophages. The available iron is usually used in bone marrow for the synthesis of hemoglobin.

### **Mechanism of action**

The usage of ferric pyrophosphate is based on the strong complex formation between these two species. Besides, the capacity of pyrophosphate to trigger iron removal from transferrin, enhance iron transfer from transferrin to ferritin and promote iron exchange between transferrin molecules. These properties make it a very suitable compound for parenteral administration, iron delivery into circulation and incorporation into hemoglobin.

### **What precautions should take when taking Elemental Iron**

Tell your doctor if you are allergic to any drugs. Make sure to tell about the allergy and what signs you had. This includes telling about rash; hives; itching; shortness of breath; wheezing; cough; swelling of face, lips, tongue, or throat; or any other signs.

### **When do need to seek medical help**

If you think there was an overdose, call your local poison control center or ER right away. Signs of a very bad reaction to the drug. These include wheezing; chest tightness; fever; itching; bad cough; blue or gray skin color; seizures; or swelling of face, lips, tongue, or throat. Very bad headache.

### **Can I take Elemental Iron with other medicines**

Sometimes drugs are not safe when you take them with certain other drugs and food. - Taking them together can cause bad side effects. - Be sure to talk to your doctor about all the drugs you take.

### **Are there any food restrictions**

Avoid Alcohol

### **How do store Elemental Iron**

Store in a cool, dry place away from the reach of children. - Medicines must not be used past the expiry date.

### **Cyanocobalamin**

Cyanocobalamin is a man-made form of vitamin B12 used to prevent and treat low blood levels of this vitamin. Most people get enough vitamin B12 from their diet. 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.

Vitamin B12 deficiency may occur in certain health conditions (such as intestinal/stomach problems, poor nutrition, cancer, HIV infection, pregnancy, old age, alcoholism). It may also occur in people who follow a strict vegetarian (vegan) diet.

### **What is cyanocobalamin for**

This medication is a vitamer (varied chemical substances) of vitamin B12, used in treating anemia, folic acid deficiency, neuropathies (damage in the nerves of peripheral nervous system), prophylaxis, and psychiatric disorders. Recommended for patients with the condition of pancreatic tumor.

### **How does cyanocobalamin work**

It is an essential nutrient that helps the body make healthy red blood and nerve cells.

### **How should cyanocobalamin be used**

Adult: IM- 250-1,000 mcg on alternate days for 1-2 week, then 250 mcg weekly. Maintenance: 1,000-mcg monthly. It comes as a solution (liquid) to be injected into the muscle or under the skin, without food.

### **Common side effects of cyanocobalamin**

Headache, nausea, vomiting, diarrhea, loss of appetite, skin rash, hot flushes

### **What do I do if I miss a dose**

Take a missed dose as soon as you think about it. If it is close to the time for your next dose, skip the missed dose and go back to your normal time. Do not take 2 doses at the same time or extra doses.

### **What precautions should I take when taking cyanocobalamin**

Tell your doctor if you are allergic to any drugs.

## When do I need to seek medical help

Seek help if you have signs of a very bad reaction to the drug. These include wheezing; chest tightness; fever; itching; bad cough; blue or gray skin color; seizures; or swelling of face, lips, tongue, or throat. Swelling, warmth, or pain in the leg or arm. Talk to your doctor if you have very loose stools (diarrhea), are feeling very tired or weak, have a rash.

## Can I take cyanocobalamin with other medicines

Use with neomycin, aminosalicilic acid, cimetidine and cochlincine will decrease absorption. Inform doctor about all other drugs you are taking including herbals.

## Are there any food restrictions

Unless your doctor tells you otherwise, continue with your normal diet.

## How do I store cyanocobalamin

Normally stored by healthcare providers in room temperature in vertical position.

## L-methylfolate

L-methylfolate is a medical food for use in people who have conditions related to folate deficiency. L-methylfolate is also used in people with major depressive disorder who have folate deficiency, or in people with schizophrenia who have hyperhomocysteinemia related to folate deficiency.

Alternatively, folic acid is the synthetic form of vitamin B9 found in many multivitamins, fortified foods, and certain pharmaceuticals. Your body must convert folic acid to the metabolically active form of folate, L-methylfolate, before your body can use it.

## How to use L-Methylfolate

**Take** this product by mouth with or without food as directed by your doctor, usually once daily. If you are taking the over-the-counter product, follow all directions on the product package.

## Pyridoxal 5'-phosphate (PLP)

Pyridoxal 5'-phosphate (PLP) is the cofactor involved in the stabilization of carbanions at C $\alpha$  of amino acids and plays a key role in amino acid metabolism. In each case, PLP is covalently bound to its cognate enzyme by an imine with the amino group of lysine.

Vitamin B6 deficiency is usually caused by pyridoxine-inactivating drugs (eg, isoniazid), protein-energy undernutrition, malabsorption, alcoholism, or excessive loss. Deficiency can cause peripheral neuropathy, seborrheic dermatitis, glossitis, and cheilosis, and, in adults, depression, confusion, and seizures.

It helps the body make the hormones serotonin (which regulates mood) and norepinephrine (which helps your body cope with stress). Vitamin B6 also helps the body make melatonin, which is important in helping regulate your internal clock and your sleep.

## Zinc bisglycinate

It is a zinc preparation used for treatment and prevention of zinc deficiency. Zinc is needed for the proper growth and maintenance of human body. It is found in several systems and biological reactions and has a role in immunity, wound healing, blood clotting, and thyroid function.

## PHARMACOLOGICAL ACTION

Actiferon Tablet is a dietary supplement, primarily used to manage anaemia caused due to low levels of Vitamin B12 and folic acid. Essential nutrients, responsible for the formation of red blood cells and helps in carrying oxygen throughout the body. It also helps in managing ailments associated with anaemia including fatigue, exhaustion and weakness.

## Benefits

- It is primarily used to manage anaemia caused due to low levels of Vitamin B12 and folic acid levels in the body
- Supports the formation of healthy red blood cells – which helps carry oxygen throughout the body and maintains cellular energy
- Manages ailments associated with anaemia including fatigue and exhaustion
- Helps maintain a healthy nervous system and manages ailments associated with diabetic neuropathies

## Directions for Use

Take 1 tablet daily, preferably with meals or as directed by the physician.

## Safety Information

- Read the label carefully before use
- Do not exceed the recommended dose
- Keep out of the reach of children
- Store in a cool dry place away from direct sunlight.

## Dosage

Adults and children over 12

- Mild iron deficiency anemia-1tablet daily with meals
- Severe anemia- 2 tablets daily with meals.

## SUMMARY & CONCLUSION

Actiferon SNDS Tablet is primarily used to manage anaemia caused due to low levels of Vitamin B12 and folic acid. Essential nutrients, responsible for the formation of red blood cells and helps in carrying oxygen throughout the

body. It also helps in managing ailments associated with anaemia including fatigue, exhaustion and weakness. It is primarily used to manage anaemia caused due to low levels of Vitamin B12 and folic acid levels in the body. Supports the formation of healthy red blood cells which helps carry

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## REFERENCES

1. International Journal of Obs.& Gyn.Vol9,no.2;2008
2. International Journal of Obs.& Gyn.Vol8;2005
3. Centre for Disease Control & Prevention. April; 2009 . Available from: <https://jamanetwork.com/journals/jamasurgery/fullarticle/2623725>
4. Alternative Medicine Review, 1998
5. March of Dimes; White plains, New York. 2009. Available from: <https://www.marchofdimes.org/materials/white-paper-on-preterm-birth.pdf>