Product Trade Name	AMIFER <sup>®</sup> JUNIOR
Drug Product name , strength and pharmaceutical form	Elemental Iron (as Iron Hydroxide Polymaltose Complex) 50 mg/5 ml, Syrup
Dossier ID	CPR-RAD-SFERS50-RW
Module 1.6.1	Product information – Prescribing information (SmPC)

# MODULE 1 ADMINISTRATIVE INFORMATION AND PRODUCT INFORMATION

# **1.6 Product Information**

# **1.6.1 Prescribing information (SmPC)**

Enclosed is the section 1.5.1 Summary of Product Characteristics (SmPC) from the dossier CPR-RAD-SFERS50-EACv1.0.

Product Trade Name	AMIFER <sup>®</sup> Junior
Drug Product name , strength and pharmaceutical form	Elemental Iron (as Iron Hydroxide Polymaltose Complex) 50mg/ 5mL , Syrup
Dossier ID	CPR-RAD-SFERS50-EAC
Module 1.5.1	Summary of Product Characteristics

# **1.5.1** Summary of Product Characteristics

Full copy of the SmPC is attached hereafter.

MA information of the EAC countries/ New MAA in procedure.

#### 8. MARKETING AUHORISATION NUMBER

- 8.1. Burundi :
- 8.2. Kenya:
- 8.3. Rwanda:
- 8.4. Tanzania:
- 8.5. Uganda:

#### 9. DATE OF FIRST REGISTRATION

- 9.1. Burundi:
- 9.2. Kenya:
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# Summary of Product Characteristics

# 1. NAME OF THE MEDICINAL PRODUCT (FPP)

AMIFER<sup>®</sup> Junior Syrup Iron 50 mg/5ml

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

**Active substance:** 5 ml (1 spoon) contains iron hydroxide polymaltose complex, equivalent to 50 mg elementary iron.

**Excipients with known effect:** AMIFER Junior syrup contains sucrose, sorbitol (E420); methyl parahydroxybenzoate (E218) and propyl parahydroxybenzoate (E216). Please refer to section 4.4 for further details.

**Excipients:** For the full list of excipients, see section 6.1.

# 3. PHARMACEUTICAL FORM

Oral solution, syrup Dark red-brown solution

# 4. CLINICAL PARTICULARS

# 4.1. Therapeutic indications

AMIFER Junior syrup is indicated for the treatment and prevention of iron deficiency of different origins and for people suffering from anemia due to iron deficiency, or to treat iron deficiency during childhood or during pregnancy and lactation.

AMIFER Junior is a medicinal product for the treatment of newborns and children; it can also be used in adults.

# 4.2. Posology and mode of administration

# Posology

Recommended dosage in children is 2 mg iron/kg/day.

Infants and children (6 months - 2 years):

1/4 spoon (= 1.25 ml) once a day (= 12.5 mg of iron).

• Children (2 - 5 years):

1/2 spoon (= 2.5 ml) 1 - 2 times a day (= 25 – 50 mg of iron).

• Children (6 -12 years):

1 spoon (= 5 ml) 1 - 2 times a day (= 50 - 100 mg of iron).

- Adolescents, adults and elderly:
  - 1 spoon (= 5 ml) 2 times a day (= 100 mg of iron).

AMIFER Junior syrup must be used for the term, recommended by the Health Care Professional. The dosage and duration of treatment depends on the degree of iron deficiency. In case of manifest iron deficiency with anemia, treatment up to normalisation of the hemoglobin level lasts on average from 3 to 5 months. The treatment is then pursued for several weeks with the dosage established for a latent iron deficiency without anemia and this in order to replenish the iron reserves. The treatment of latent iron deficiency without anemia lasts approximately 1 to 2 months.

Following the elimination of the symptoms of iron deficiency, it must be used for at least an additional month for replenishment of stores

# Method of administration

Oral administration.

AMIFER Junior syrup must be taken with or after meals, it may be taken by mixing with fruit or vegetable juices; not with milk (iron formulations must be taken at least 2 hours after milk or calcium products).

# 4.3. Contraindications

- Hypersensitivity to iron or to any of the excipients ingredients, listed in section 6.1.
- Conditions leading to an iron overloading (hemochromatosis, hypersiderosis, chronic hemolysis).
- Anemia which is not accompanied by iron deficiency (such as hemolytic anemia).
- An iron use disorder (lead to anemia, sideroachrestic anemia).
- Thalassemia.
- Progressive and chronic arthritis.
- Conditions, requiring regular and continuous blood transfusions.
- HIV infection without clinically proven iron deficiency anemia.
- Severe liver and kidney diseases.

# 4.4. Special warning and precautions for use

- Caution must be exercised in case of
  - gastric ulcer,
  - alcoholism or conditions which disturb iron absorption from intestines.
- AMIFER Junior syrup contains sucrose: Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrose-isomaltase insufficiency should not take this medicine.
- AMIFER Junior syrup contains sorbitol (E420): Patients with rare hereditary problems of fructose intolerance should not take this medicine,

- AMIFER Junior syrup contains methyl parahydroxybenzoate (E218) and propyl parahydroxybenzoate (E216), which may yield (possibly delayed) allergic reactions.
- During administration of oral iron formulations, the color of stool may darken; this
  is normal and does not require any measures, it does not cause false positive
  results during tests for occult blood in stool, therefore, there is no need to
  discontinue treatment during this test.
- In various diseases and in cancer-related anemia, the taken iron is stored in liver, yet following the treatment of these diseases and cancer, it departs from liver and becomes useable.

# 4.5. Interactions with other medicinal products and other forms of interactions

- Antacids decrease iron resorption.
- Iron formulations must be taken at least 2 hours after milk or calcium products
- There is reciprocal interference in resorption between tetracyclines, cholestyramine, ciprofloxacin, levofloxacin, norfloxacin, ofloxacin, temafloxacin, penicillamine, and salts of iron.
- Iron salts decrease the resorption of methyldopa.
- If one of the above-mentioned medicinal combinations is required, make sure to allow 2-3 hours between oral intakes.
- Interaction studies were performed only in adults.

# 4.6. Fertility, pregnancy and lactation

AMIFER Junior syrup may be used during pregnancy and lactation if recommended by the physician or pharmacist.

The iron requirement in a pregnant woman is between 440 mg and 1.05 g.

Data from a small number of pregnant women after the first trimester have not shown any adverse effects on pregnancy or the health of the foetus or newborn. Reproduction studies in animals have not shown any direct or indirect toxicity that may affect pregnancy, embryonic development, and foetal development. However, the administration during pregnancy must be cautious.

Every day, almost 0.15 to 0.3 mg of iron is excreted in breast milk. Iron is transported through the placenta by the active route because by a concentration gradient.

The breast milk naturally contains iron bound to lactotransferrine. The amount of iron from the Iron hydroxide polymaltose complex likely to pass through breast milk is not known. It is unlikely that the intake of AMIFER Junior syrup by the lactating mother can cause adverse effects in breastfed infants.

# 4.7. Effects on the ability to drive and use machines

There were no adverse effects related to driving or operating machinery. It is unlikely for iron preparations to have an impact on the ability to drive or operate machines.

# 4.8. Undesirable effects

AMIFER Junior syrup occasionally causes side effects in some patients. The following convention was used for classification of adverse reactions: Very common ( $\geq 1 / 10$ ), frequent ( $\geq 1/100$ , <1/10), uncommon ( $\geq 1/1000$ , <1/100), rare ( $\geq 1/10 000$ , <1/1000), Very rare (<1 / 10,000).

- The use of AMIFER Junior syrup should be discontinued and a physician or pharmacist notified immediately and the nearest hospital emergency department should be consulted if any of the following occur (very rare: <1 / 10,000 ):
  - severe allergy to AMIFER<sup>®</sup> Junior syrup: difficulty in breathing, swelling of the face, lips, tongue or throat, sudden decrease in blood pressure, generalized and severe redness, itching (urticaria), asthma.
- common: ≥ 1/100, <1/10):
  - indigestion,
  - abdominal pain,
  - nausea or vomiting,
  - burning sensation in the stomach,
  - bitter liquid in the mouth,
  - slight abdominal pain,
  - itching of blisters on the skin,
  - rashes,
  - redness,
  - headache,
  - variation in color of urine and stool.

# 4.9. Overdose

# Symptoms

- Diarrhea, stomach pain and vomiting may occur in case of overdose.
- In the most severe cases, metabolic acidosis, severe muscle spasms and coma can be observed.
- Inadvertent administration of iron-containing products causes lethal (fatal) toxicity in children under 6 years of age.
- In case of overdose, a doctor or pharmacist or poison control center should be consulted promptly.

# Treatment

• Administer an emetic.

• Emesis should be followed by a gastric lavage and possibly by a symptomatic treatment, if necessary.

#### Antidote

• Deferoxamine (iron chelator) orally or parenterally.

#### 5. PHARMACOLOGICAL PROPERTIES

#### 5.1. Pharmacodynamic properties

**Pharmacotherapeutic group:** Trivalent iron, oral preparation, ferric oxide polymaltose complexes.

ATC code: B03AB05.

Ferric ion is a component of many enzymes necessary for energy transfer (e.g. cytochrome oxidase, xanthine oxidase, and succinic dehydrogenase), and it is also present in compounds necessary for the transfer and use of oxygen (e.g. hemoglobin and myoglobin).

The administration of iron preparations corrects erythropoietic abnormalities arising from iron deficiency. Iron administration also eliminates other symptoms due to iron deficiency such as tongue sores, dysphagia, nail and skin dystrophy, as well as cracking of the lips.

# 5.2. Pharmacokinetic properties

# Absorption

Iron absorption is very complex and is influenced by several factors including the form in which it is administered, dose, and iron reserve, erythropoietic degree and diet. In healthy subjects, approximately 5-10% of dietary iron is absorbed and almost 10% to 30% of iron deficient subjects. It is reported that inorganic iron is absorbed twice as much as dietary iron. Although iron absorption takes place along the gastrointestinal tract, it is greater at the duodenum in the proximal portion of the jejunum and decreases progressively in the distal portion.

AMIFER Junior syrup is rapidly absorbed from the gastrointestinal tract after oral administration. The amount absorbed is dependent on the degree of iron deficiency of the patient. The more important the iron deficiency, the greater the iron absorption.

# Distribution

Ferric iron combines with the apoferritin protein to produce ferritin, which is stored in mucosal cells which are detached and excreted in the stool at the end of their life. The concentration of iron in a male adult is 50 mg/kg body weight and 35 mg/kg body weight in a female adult. Iron is found in the human body only in the form of a complex with a protein or in the heme molecule. Approximately 70% of iron is found in hemoglobin, 25% as ferritin iron reserve, and hemosiderin, 4% in myoglobin, 0.5% in heme enzymes and 0.1% in transporters. Iron reserves in the form of ferritin and hemosiderin are localised in the liver, reticuloendothelial system, bone marrow and in the spleen. In women, iron reserves tend to be less than half those of man. In patients with negative iron balance, iron stores decrease before the hemoglobin concentration is reduced.

# Elimination

Iron metabolism is using a simple system. The large amount of iron emanating from the destruction of hemoglobin is preserved and reused by the body. Non-absorbed iron is excreted in the faeces.

#### 5.3. Preclinical safety data

There are no preclinical data of relevance to the prescriber which are additional to that already included in other sections of the Summary of Product Characteristics.

#### 6. PHARMACEUTICAL PARTICULARS

#### 6.1. List of excipients

Sucrose, Liquid sorbitol non-crystalising (E420), Methyl Parahydroxybenzoate (E218), Propyl Parahydroxybenzoate (E216), Cream Flavour, Deionized Water.

#### 6.2. Incompatibilities

None known.

#### 6.3. Shelf life

36 months

#### 6.4. Special precautions for storage

Store below 30°C.

In case you notice irregularities on the product and/or package, do not use it.

# 6.5. Nature and contents of container

AMIFER Junior syrup is presented in a honey-colored glass bottles, containing 150 ml of syrup, together with a plastic measuring spoon (indicating 1.25 ml-2.5ml-5 ml). The syrup has a characteristic smell, and appears as a dark red-brown solution.

# 6.6. Special precautions for disposal and other handlings

No special requirements for disposal. Any unused product or waste material should be disposed of in accordance with local requirements.

# 7. MARKETING AUTHORISATION HOLDER AND MANUFACURING SITE ADDRESS

# 7.1. Marketing Authorization Holder

Dafra Pharma GmbH Mühlenberg 7 4052 Basel Switzerland.

# 7.2. Manufacturer

Santa Farma İlaç Sanayi A.Ş. GEBKİM Kimya İhtisas Organize Sanayii Bölgesi Çerkeşli Yolu Üzeri Erol Kiresepi Cad. No: 8, 41455 Dilovası – KOCAELİ Turkey

# 8. MARKETING AUHORISATION NUMBER

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# **10. DATE OF REVISION OF THIS TEXT**

January 2018

# **11. DOSIMETRY (if applicable)**

Not applicable.

# 12. INSTRUCTIONS FOR PREPARATION OF RADIOPHARMACEUTICALS (if applicable)

Not applicable.