Summary of Product Characteristics

1. NAME OF THE MEDICINAL PRODUCT

Ferofix 100 mg chewable tablets

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each chewable tablet contains Iron (III) hydroxide polymaltose complex equivalent to 100 mg Iron (III).

Excipient(s) with known effect
Each tablet contains glucose (from dextrates).

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Chewable tablet.
Beige/brown spotted, round tablets of approximately 12 mm diameter.

4. CLINICAL PARTICULARS

4.1. Therapeutic indications

Treatment of iron deficiency in adults and adolescents above the age of 12.

4.2. Posology and method of administration

Posology
The dosage and duration of treatment depend on the degree of iron deficiency.

Adolescents (> 12 years old) and adults:
Iron deficiency: 100 to 300 mg (1 to 3 tablets) daily depending on the severity of the iron deficiency. The effect of treatment should be monitored by laboratory tests, such as haemoglobin and / or iron storage levels, for dose optimisation and duration of treatment.

Paediatric population
Ferofix 100 mg chewable tablets are not recommended in children aged 12 years old and younger.

Method of administration
It is recommended to take this medicine during or immediately after a meal, for better absorption. Ferofix 100 mg chewable tablets can be chewed or swallowed whole.

4.3. Contraindications

- Hypersensitivity to the active substance or to any of the excipients listed in section 6.1,
- Patients with iron overload syndromes, e.g. hemochromatosis or hemosiderosis,
- Patients with iron storage or assimilation diseases, e.g. thalassemia,
- Patients with anemia not caused by iron deficiency, e.g. haemolytic anemia, or megaloblastic anemia due to vitamin B12 deficiency.

4.4. Special warnings and precautions for use

Only patients with iron deficiency with or without anemia should be treated. The reason for iron deficiency should be investigated. In cases of anemia related to inflammation, for example in infections, iron treatment is preferably given after recovery.

During treatment with Ferofix 100 mg chewable tablets there may be dark-colored stools, which is not clinically significant.

Iron-based preparations can cause poisoning, especially in children. Particular attention should be paid in case of iron supplementation.

The effect of Ferofix should be assessed during therapy to assure a clinical response to therapy. See section 4.2.

Ferofix contains glucose (from dextrates). Patients with rare glucose-galactose malabsorption should not take this medicine.

4.5. Interaction with other medicinal products and other forms of interaction

Since the iron is complex-bound, ionic interaction with food components (phytin, oxalates, tannin etc) and concomitant administration of medicaments (tetracyclines, antacids) are unlikely to occur.

The haemoccult test (selective for Hb) for the detection of occult blood is not impaired and therefore there is no need to interrupt iron therapy.

Concomitant use of oral and parenteral iron should be avoided since concomitant use significantly inhibits absorption of oral iron.

4.6. Fertility, pregnancy and lactation

Pregnancy

Data in a limited number of pregnant women after the first trimester showed no adverse effects of iron polymaltose on pregnancy or on the health of the foetus/newborn child. Animal studies showed no direct or indirect toxicity effect on pregnancy, embryonic and foetal development (see section 5.3). Iron is an essential nutrient throughout

pregnancy. Ferofix 100 mg chewable tables may be used in pregnancy when there is a risk of iron deficiency.

Breast-feeding
Breast milk naturally contains iron bound to lactoferrin. It is not known how much iron from the complex is passed into breast milk. Ferofix 100 mg chewable tables may be used in lactation when there is a risk of iron deficiency.

Fertility
There are no data on the effect of ferric hydroxide polymaltose complex on human fertility.

4.7. Effects on ability to drive and use machines

Ferofix 100 mg chewable tablets has no or negligible influence on the ability to drive and use machines.

4.8. Undesirable effects

The safety and tolerability of products containing Iron (III) hydroxide polymaltose complex has been evaluated in numerous clinical studies and published reports. The following adverse drug reactions have been reported:

Table 1. Adverse drug reactions observed in clinical trials

System Organ Class	**Very common (≥ 1/10)**	**Common (≥ 1/100, < 1/10)**	**Uncommon (≥ 1/1,000, < 1/100)**
Gastrointestinal disorders	Dark colouration of the stool	Diarrhea, nausea, dyspepsia	Vomiting, constipation, abdominal pain, discoloration of teeth
Skin and subcutaneous tissue disorders			Rash, itching
Nervous system disorders			Headache

Dark colouration of the stool is not clinically significant.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal

product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V.

4.9. Overdose

Iron products with ferrous compound is very toxic, especially for small children. Ferofix contains the ferric form of iron, which is not present in the gastro-intestinal tract as free iron and therefore it is anticipated to be less toxic than iron products with ferrous compounds. There have been no reported cases of accidental poisoning with fatal consequences, however the data on overdosage with the ferric form of iron are limited.
In case of overdosage the clinical status should be assessed and general routines for suspected overdose cases should be followed. Symptoms of overdosage include: vomiting, hematemesis, abdominal pain, lethargy, acute liver failure, coagulopathy, acute tubular necrosis, metabolic acidosis, shock, gastric scarring and pyloric stricture. Acute liver failure and cardiovascular collapse are the main causes of death due to iron overdose.

5. PHARMACOLOGICAL PROPERTIES

5.1. Pharmacodynamic properties

Pharmacotherapeutic group: Iron trivalent, oral preparations
ATC code: B03AB05

The polynuclear iron (III)-hydroxide cores are superficially surrounded by a number of non-covalently bound polymaltose molecules resulting in an overall complex molecular mass (Mw) of more than 50 kD, which is so large that diffusion through the membrane of mucosa is more than 40 times smaller than that of the hexaqua-iron (II) units. The complex is stable and does not release ionic iron under physiological conditions. The iron in the poly-nuclear cores is bound in a similar structure as in the case of physiologically occurring ferritin. Due to this similarity, only the iron (III) of the complex is absorbed by an active absorption process. By means of competitive ligand exchange, any iron binding protein in the gastro-intestinal fluid and on the surface of the epithelium, take up iron (III). The absorbed iron is stored mainly in the liver, where it is bound to ferritin. Later in the bone marrow, it is incorporated into haemoglobin.
Iron (III)-Hydroxide Polymaltose Complex has no pro-oxidative properties such as there are in iron (II) salts. The susceptibility of lipoproteins such as Very Low Density Lipoprotein (VLDL) + Low Density Lipoprotein (LDL) to oxidation is reduced. Ferofix 100 mg chewable tablets do not cause teeth staining.

5.2. Pharmacokinetic properties

Studies show that absorption of iron measured as haemoglobin in erythrocytes is inversely proportional to the dose given (the higher the dose, the lower the absorption). There is a statistically negative correlation between the extent of iron deficiency and the amount of iron absorbed (the higher the iron deficiency, the better the absorption). The highest absorption of iron is in the duodenum and jejunum. Iron which is not absorbed is excreted via the faeces. Excretion via the exfoliation of the epithelial cells of the gastro-intestinal tract and the skin as well as perspiration, bile and urine only amount to

approximately 1mg of iron per day. For women, iron loss due to menstruation has also to be taken into account.

5.3. Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies on safety pharmacology, repeated dose toxicity, genotoxicity and toxicity to reproduction.

6. PHARMACEUTICAL PARTICULARS

6.1. List of excipients

Sodium cyclamate (E952)
Vanillin
Macrogol (E1521)
White chocolate flavour,
Dextrates, hydrated
Cellulose microcrystalline (E460)
Talc (E553b)

6.2. Incompatibilities

Not applicable.

6.3. Shelf life

2 years.

6.4. Special precautions for storage

This medicinal product does not require any special storage conditions.

6.5. Nature and contents of container

Aluminium/aluminium blister packages.
Pack sizes: 30, 50 or 100 tablets.

Not all pack sizes may be marketed.

6.6. Special precautions for disposal and other handling

No special requirements.

7. MARKETING AUTHORISATION HOLDER

[<To be completed nationally>]

8. MARKETING AUTHORISATION NUMBER(S)

[<To be completed nationally>]

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: dd/mm/yyyy

10. DATE OF REVISION OF THE TEXT

5 July 2017