

Summary of Product Characteristics for Pharmaceutical Products

1. Name of the medicinal product:

DINZINC DT TABLETS

2. Qualitative and quantitative composition:

Each Dispersible tablet contains:

Zinc sulfate monohydrate.....20 mg.

For a full list of excipients, see section 6.1.

3. Pharmaceutical form

Dispersible tablet

White to off white, circular flat faced beveled edge dispersible tablets, break line on one side and plain on the other side.

4. Clinical particulars

4.1 Therapeutic indications

DINZINC DT 20mg Tablet is indicated for the treatment of acute and persistent diarrhoea in infants and children up to 5 years of age

4.2 Posology and method of administration

Posology

For acute and persistent diarrhoea

For children less than 6 months of age: ½ tablet once daily for 10-14 days. For children 6 months of age to 5 years of age: 1 tablet once daily for 10-14 days.

The tablet (or half tablet) should be dispersed completely in 1 teaspoon (5 ml) of clean water or breast milk and the entire amount administered orally to the infant or child.

It is recommended that doses be administered between meals and a repeat dose be given if vomiting occurs within 30 minutes.

For missed doses, the missing dose can be taken as soon as possible, unless there is less than 6 hours until the next dose.

4.3 Contraindications

Not applicable

4.4 Special warnings and precautions for use

Drugs which may inhibit zinc absorption, such as penicillamine, sodium valproate and ethambutol, should not be coadministered with Zincfant® 20mg Tablets, unless the risks of discontinuation of the drug are judged to outweigh the benefit of zinc in treatment of the child's diarrhoea. Excipients Zincfant® 20mg Tablets contain aspartame, a source of phenylalanine. This should be considered when prescribing the product to patients with phenylketonuria.

4.5 Interaction with other medicinal products and other forms of interaction

Antibiotics

When taken together, zinc may reduce the absorption of tetracyclines (but not doxycycline), and quinolone antibiotics. In addition, zinc may also interfere with the absorption of cephalexin or ceftibuten. An interval of at least three hours should be allowed between administration of zinc and any of these medicines.

4.6 Fertility, pregnancy, and lactation

Pregnancy

The safety of Zincfant® 20mg Tablet in pregnancy has not been established.

Lactation

Zinc crosses the placenta and is present in breast milk. The safety of Zincfant® 20mg Tablet in lactation has not been established.

4.7 Effects on ability to drive and use machines.

There is no evidence regarding the effect of zinc on the ability to drive or use machines, however Zincfant® 20mg Tablet is not expected to have any effect on the ability to drive and use machines.

4.8 Undesirable effects

In clinical trials in children, administration of Zincfant® 20mg Tablets was associated with vomiting or regurgitation. In one study vomiting attributed to the tablet was reported very commonly ($\geq 10\%$), i.e. in 14% and regurgitation was reported commonly ($\geq 1\%$ to $<10\%$), i.e. in 5.2% of the children, respectively. In most cases vomiting or regurgitation occurred shortly after administration of the first dose (within 10 minutes) and was not recurrent. Zinc salts may also cause abdominal pain and dyspepsia (frequency unknown).

4.9 Overdose

Symptoms

High doses of zinc cause emesis. In addition, zinc sulfate is corrosive at high doses, and may cause irritation and corrosion of the gastrointestinal tract, including ulceration of the stomach and possible perforation. Overdosage with zinc has also been associated with acute renal tubular necrosis and interstitial nephritis. Prolonged high dose zinc supplementation may result in copper deficiency.

Treatment

In cases of acute zinc overdose, treatment is primarily supportive, however induced emesis, gastric lavage, or activated charcoal may be useful in cases of substantial ingestions of zinc tablets. Chelating agents such as calcium disodium EDTA may be useful.

5. Pharmacological properties

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other mineral supplements, ATC code: A12CB01

Zinc sulfate is a zinc salt used for the treatment of acute and persistent diarrhoea in children.

Zinc is an essential trace element which is present in a wide range of foods. It is found in all tissues.

Normal growth and tissue repair depend upon adequate zinc levels. Zinc acts as an integral part of several enzymes important to protein and carbohydrate metabolism. . Severe zinc deficiency is associated with growth retardation, primary hypogonadism, skin disease, disturbances of taste and smell, and impaired immunity, with increased susceptibility to infection.

Zinc supplementation has been shown to reduce the duration and severity of diarrhea in populations of children with a high incidence of zinc deficiency, and also to reduce the frequency of recurrences in the subsequent 2-3 months. The beneficial effects of zinc are likely associated with reconstitution of the immune response, however direct inhibitory effects of zinc on enteric pathogens have also been reported.

5.2 Pharmacokinetic properties

Absorption

Zinc is incompletely absorbed from the small bowel, with between 10 and 40% of an ingested dose absorbed. Numerous dietary components

can interfere with zinc absorption, particularly phytates and fibre, which bind to zinc, resulting in poorly absorbed zinc complexes.

The absorption of zinc from ZinCfant® tablets was examined in 10 healthy, zinc replete, adult male volunteers (baseline mean plasma zinc level \pm SD of 15.1 \pm 3.5 mmol/L). Absorption of zinc from 1½ ZinCfant® tablets (i.e. a 30 mg dose) was rapid, with a maximal increase in mean plasma zinc level (\pm SD) of 11.6 (\pm 6.0) mmol/L observed within approximately 2 hours of administration.

Distribution

Approximately 60% of circulating zinc is bound to albumin and roughly 30% is bound to macroglobulin. The majority of zinc is stored in the liver and kidney, chiefly intracellularly, and bound to metalloproteins.

Elimination

In adults, it has been estimated that approximately 0.5 to 1.0 mg/day is secreted in the biliary tract and excreted in the stool, while 0.5 to 0.8 mg/day is excreted in the urine.

5.3 Preclinical safety data

Non-clinical data have not revealed significant hazards for humans, based on standard studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential, and reproductive toxicity. Effects in non-clinical studies were observed only at exposures sufficiently in excess of the maximum human exposure to be of little clinical relevance.

6. Pharmaceutical particulars

List of excipients

Tablet core:

Microcrystalline Cellulose (PH 112)

Crospovidone

Croscarmellose Sodium

Colloidal Silicon Dioxide

Purified Talc

Magnesium Stearate

Strawberry Flavour Powder IH

Sodium Saccharin

6.1 Incompatibilities

Not applicable

6.2 Shelf life

24 months

6.3 Special precautions for storage:

Store below 30°C. Protect from light

6.4 Nature and contents of container

Alu-PVC blisters strips contained in a unit carton along with the information leaflet.

Pack size: 10 x 10's.

6.5 Special precautions for disposal and other handling:

No special requirements

7. Marketing authorization holder and manufacturing site addresses

Marketing authorization holder:

Dinlas Pharma EPZ Limited
Mombasa Road Syokimau
P.O Box 22661-00505
Nairobi-Kenya

Manufacturing site address:

Dinlas Pharma EPZ Limited
Mombasa Road Syokimau
P.O Box 22661-00505
Nairobi-Kenya

8. Marketing authorization number

CTD10673

9. Date of first registration

19/04/2023

10. Date of revision of the text:

September 2023

11. Dosimetry:

Not Applicable

12. Instructions for Preparation of Radiopharmaceuticals:

Not Applicable