

SUMMARY OF PRODUCT CHARACTERISTIC (SmPC)

1. Name of the medicinal product

GREENZORAL CREAM (KETOCONAZOLE CREAM 2%)

2. Qualitative and quantitative composition

Each gram contains:

Ketoconazole USP20 mg

Cream Base.....q.s

3. Pharmaceutical form

Topical Cream

4. Clinical particulars

4.1 Therapeutic indications

It is belong to an imidazole antifungal agent used in the prevention and treatment of a variety of Fungal infections. It has a broad spectrum antifungal used to treat seborrheic dermatitis and fungal skin infections. It is indicated in the treatment of dermatophyte infections of the skin such as tinea corporis, tinea cruris, tinea manus and tinea pedis infections due to Trichophyton spp, Microsporon spp and Epidermophyton spp. It is also indicated for the treatment of cutaneous candidosis (including vulvitis), tinea (pityriasis) versicolor and seborrhoeic dermatitis caused by Malassezia (previously called Pityrosporum) spp.

4.2 Posology and method of administration

Ketoconazole cream is for use in adults.

Cutaneous candidosis, tinea corporis, tinea cruris, tinea manus, tinea pedis and tinea (pityriasis) versicolor:

It is recommended that Ketoconazole Cream 2% be applied once or twice daily to cover the affected and immediate surrounding area.

The usual duration of treatment is: *tinea versicolor* 2–3 weeks, yeast infections 2-3 weeks, *tinea cruris* 2-4 weeks, *tinea corporis* 3–4 weeks, *tinea pedis* 4-6 weeks.

Seborrheic dermatitis:

Ketoconazole Cream 2% should be applied to the affected areas once or twice daily. The usual initial duration of treatment in seborrheic dermatitis is 2 to 4 weeks. Maintenance therapy can be applied intermittently (once weekly) in seborrheic dermatitis. Treatment should be continued until a few days after the disappearance of all symptoms. The diagnosis should be reconsidered if no clinical improvement is noted after 4 weeks of treatment. General measures in regard to hygiene should be observed to control sources of infection or reinfection. Seborrhoeic dermatitis is a chronic condition and relapse is highly likely.

Method of administration: Cutaneous administration.

Pediatrics patients

The safety and efficacy of Ketoconazole Cream 2% in children (17 years of age and younger) has not been established.

4.3 Contraindications

Ketoconazole Cream 2% is contra-indicated in patients with a known hypersensitivity to any of the ingredients or to ketoconazole itself.

4.4 Special warnings and precautions for use

Ketoconazole Cream 2% is not for ophthalmic use.

If coadministered with a topical corticosteroid, to prevent a rebound effect after stopping a prolonged treatment with topical corticosteroids it is recommended to continue applying a mild topical corticosteroid in the morning and to apply Ketoconazole Cream BP 2% w/w in the evening, and to subsequently and gradually withdraw the topical corticosteroid therapy over a period of 2-3 weeks. Ketoconazole Cream contains 6000 mg propylene glycol in each 30 g tube, which is equivalent to 200 mg/g. Ketoconazole Cream contains cetyl alcohol and stearyl alcohol, which may cause local skin reactions (e.g. contact dermatitis).

4.5 Interaction with other medicinal products and other forms of interaction

No interaction studies have been performed.

4.6 Fertility, pregnancy and lactation

There are no adequate and well-controlled studies in pregnant or lactating women. Data on a limited number of exposed pregnancies indicate no adverse effects of topical ketoconazole on pregnancy or on the health of the fetus/newborn child. Animal studies have shown reproductive toxicity at doses that are not relevant to the topical administration of ketoconazole. Plasma concentrations of ketoconazole are not detectable after topical application of Ketoconazole Cream 2% to the skin of non-pregnant humans. (See Pharmacokinetic properties, section 5.2) There are no known risks associated with the use of Ketoconazole Cream 2% in pregnancy or lactation.

4.7 Effects on ability to drive and use machines

Ketoconazole Cream 2% has no influence on the ability to drive and use machines.

4.8 Undesirable effects

The safety of ketoconazole cream was evaluated in 1079 subjects who participated in 30 clinical trials. Ketoconazole cream was applied topically to the skin. Based on pooled safety data from these clinical trials, the most commonly reported ($\geq 1\%$ incidence) adverse reactions were (with % incidence): application site pruritus (2%), skin burning sensation (1.9%), and application site erythema (1%). Including the above-mentioned adverse reactions, the following table displays adverse reactions that have been reported with the use of ketoconazole cream from either clinical trial or post marketing experiences. The displayed frequency categories use the following convention:

Very common ($\geq 1/10$) Common

($\geq 1/100$ to $< 1/10$) Uncommon

($\geq 1/1,000$ to $< 1/100$) Rare

($\geq 1/10,000$ to $< 1/1,000$) Very

rare ($< 1/10,000$)

Not Known (cannot be estimated from the available clinical trial data).

System Organ Class	Adverse Reactions		
	Frequency Category		
	Common (≥1/100 to <1/10)	Uncommon (≥1/1,000 to <1/100)	Not Known
Immune System Disorders		Hypersensitivity	
Skin and Subcutaneous Tissue Disorders	Skin burning sensation	Bullous eruption contact Rash exfoliation Sticky skin	Urticaria
General Disorders and Administration Site Conditions	Application site erythema Application site pruritus	Application site bleeding Application site discomfort Application site dryness Application site inflammation Application site irritation Application site paresthesia Application site reaction	

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorization 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:

Yellow Card Scheme

Website: <https://yellowcard.mhra.gov.uk> or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Topical Application

Excessive topical application may lead to erythema, edema and a burning sensation, which will disappear upon discontinuation of the treatment.

Ingestion

In the event of accidental ingestion, supportive and symptomatic measures should be carried out.

5. Pharmacological properties

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Antifungal for Topical Use, Imidazole and triazole derivatives

ATC Code: D01AC08

Usually ketoconazole cream acts rapidly on pruritus, which is commonly seen in dermatophyte and yeast infections, as well as skin conditions associated with the presence of *Malassezia* spp. This symptomatic improvement is observed before the first signs of healing are observed.

Ketoconazole, a synthetic imidazole dioxolane derivative, has a potent antimycotic activity against dermatophytes such as *Trichophyton* spp., *Epidermophyton floccosum* and *Microsporum* spp. and against yeasts, including *Malassezia* spp. and *Candida* spp. The effect on *Malassezia* spp. is particularly pronounced.

5.2 Pharmacokinetic properties

Plasma concentrations of ketoconazole were not detectable after topical administration of Ketoconazole Cream BP 2%W/W in adults on the skin. In one study in infants with seborrhoeic dermatitis (n = 19), where approximately 40 g of Ketoconazole Cream BP 2%W/W was applied daily on 40% of the body surface area, plasma levels of ketoconazole were detected in 5 infants, ranging from 32 to 133 ng/mL

5.3 Preclinical safety data

Effects in non-clinical studies were observed only at exposures considered sufficiently in excess of the maximum human exposure indicating little relevance to clinical use.

6. Pharmaceutical particulars

6.1 List of excipients

Cetostearyl Alcohol, Cetodet-500(Ceto Mecrogol 1000), Petroleum jelly, Heavy Liquid Paraffin Methyl Hydroxybenzoate, Sodium Acid Phosphate, Disodium EDTA, Ketoconazole, Propylene Glycol, Purified water.

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

36 months.

6.4 Special precautions for storage

Keep out of the reach and sight of children.

Do not store above 30°C. Protect from light.

Do not Freeze. Store in the original container or carton. Do not use after the expiry date which is stated on the label carton, tube after abbreviation used for expiry date.

6.5 Nature and contents of container

Pack size: 20 gm Lami tube

6.6 Special precautions for disposal and other handling

No special requirements

7. Details of the Manufacturer



KESAR PHARMA (P) LIMITED

Plot Survey No.50-P/2, Po Chhatral. Gandhinagar, INDIA

8. Marketing authorization holder

Berlin Pharma & Healthcare Ltd.

42, Comfort Oboh, Kiri-Kiri industrial Area. Apapa-Lagos, Nigeria.

9. Marketing authorization number(s)

NAFDAC REG. NO.: B4 - 7360

10. Date of first authorization/renewal of the authorization

Not Applicable

11. Date of revision of the text:

Not Applicable