

## **1. Name of the medicinal product**

ARIGOLD (Ketoconazole Cream BP 2 % w/w)

### **1.1 International Non-Proprietary Name (INN)**

Ketoconazole BP

### **1.2 Strength**

2 % w/w

### **1.3 Pharmaceutical form**

Topical cream

## **2. Qualitative and quantitative composition**

Ketoconazole BP 2%w/w

Cream base q.s.

## **3. Pharmaceutical form**

Topical cream

## **4. Clinical particulars**

### **4.1 Therapeutic indications**

For topical application 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.

Ketoconazole cream 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**

#### **Posology**

Ketoconazole cream is for use in adults.

#### **Tinea pedis:**

Ketoconazole Cream should be applied to the affected areas twice daily. The usual duration of treatment for mild infections is 1 week. For more severe or extensive infections (eg involving the sole or sides of the feet) treatment should be continued until a few days after all signs and symptoms have disappeared in order to prevent relapse.

#### **For other infections:**

Ketoconazole Cream should be applied to the affected areas once or twice daily, depending on the severity of the infection.

The treatment should be continued until a few days after the disappearance of all signs and symptoms. The usual duration of treatment is: tinea versicolor 2–3 weeks, tinea corporis 3–4 weeks.

The diagnosis should be reconsidered if no clinical improvement is noted after 4 weeks. 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.

Paediatrics

There are limited data on the use of ketoconazole 2% cream in paediatric patients.

#### **4.3 Contraindications**

It 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 is not for ophthalmic use.

If co-administered 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 in the evening, and to subsequently and gradually withdraw the topical corticosteroid therapy over a period of 2-3 weeks.

#### **4.5 Interaction with other medicinal products and other forms of interaction**

No interaction studies have been performed.

#### **4.6 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 foetus/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 to the skin of non-pregnant humans. There are no known risks associated with the use of Ketoconazole Cream in pregnancy or lactation.

#### **4.7 Effects on ability to drive and use machines**

No studies on the effects on the ability to drive and use machines have been performed.

#### **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).

### Immune System Disorders:

Uncommon-Hypersensitivity

### Skin and Subcutaneous tissue disorders:

Common-Skin burning sensation; Uncommon-Bullous eruption, Dermatitis contact, Rash, Skin exfoliation & Sticky skin; Unknown-Urticaria

### General Disorders and Administration Site Conditions:

Common-Application site erythema, Application site pruritus; Uncommon-Application site bleeding, Application site discomfort, application site dryness, application site inflammation, application site irritation, application site paresthesia and application site reaction.

## **4.9 Overdose**

### **Topical Application**

Excessive topical application may lead to erythema, oedema 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**

#### **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.

A study in 250 patients has shown that application twice daily for 7 days of ketoconazole 2% cream vs clotrimazole 1% cream for 4 weeks on both feet demonstrated efficacy in patients with tinea pedis (athlete's foot) presenting lesions between the toes. The primary efficacy endpoint was negative microscopic KOH examination at 4 weeks. Ketoconazole 2% treatment showed equivalent efficacy to 4 weeks clotrimazole 1% treatment. There was no evidence of relapse following treatment with ketoconazole cream at 8 weeks.

### **5.2 Pharmacokinetic properties**

Plasma concentrations of ketoconazole were not detectable after topical administration of Nizoral 2% Cream in adults on the skin. In one study in infants with seborrhoeic dermatitis (n = 19), where approximately 40 g of Nizoral 2% cream 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**

No Study reports available.

## 6. Pharmaceutical particulars

### 6.1 List of excipients

Cetostearyl Alcohol	BP
Ceto macrogol 1000	BP
Liquid Light Paraffin	BP
White Petrolleum Jelly	BP
Chloro Cresol (PCMC)	BP
Propylene Glycol	BP
Di- Sodium EDTA	BP
Di- Sodium Hydrogen Ortho Phosphate	BP
Tween 80	BP
Purified Water	BP

### 6.2 Incompatibilities

Not Applicable.

### 6.3 Shelf life

36 Months

### 6.4 Special precautions for storage

Keep in a cool, dry and dark place. Do not allow to freeze.

### 6.5 Nature and contents of container

Ketoconazole cream is packed in 15 g laminated tube. Such 1 tube is packed in a carton along with pack insert.

### 6.6 Special precautions for disposal and other handling

No Special precautions

## 7. Manufacturer:

**Merit Organics Ltd**

509, 5th Floor, Western Edge I,

Western Express Highway

Borivali East

Mumbai - 400 066

**8. Marketing Authorization Holder**

**Merit Organics Ltd**

509, 5th Floor, Western Edge I,

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**9. Date of revision of the text**

NA

**10. DOSIMETRY (IF APPLICABLE)**

Not applicable

**11. INSTRUCTIONS FOR PREPARATION OF RADIOPHARMACEUTICALS  
(IF APPLICABLE)**

Not Applicable