SUMMARY OF PRODUCT CHARACTERISTICS

1. Name of the medicinal product:
MIXIDERM
Clobetasol Propionate, Gentamycin & Miconazole Nitrate Cream.

2 Qualitative and quantitative compositions:
Clobetasol propionate USP.....% W/V
Gentamicin Sulphate BP
Eq. to Gentamicin... .....% W/V
Miconazole Nitrate BP.....% W/V
Cream base.....Q.S.
For the full list of excipients, see section 6.1.

3.Pharmaceutical form:

Topical cream.

A white colored cream

4.Clinical particulars
4.1 Therapeutic indications

Mixiderm is indicated for the treatment of more resistant dermatoses such as psoriasis, eczemas, dermatitis and other skin conditions complicated by susceptible bacterial and/or fungal infections.

4.2 Posology and method of administration
Apply thinly and gently to the affected area once or twice daily until improvement occurs.
Treatment should not be more than 50g per week.
If no improvement is seen within two to four weeks, reassessment of the diagnosis, or referral, may be necessary.

Route of administration

For topical administration.

4.3 Contraindications

MIXIDERM is contraindicated in individuals with a known hypersensitivity to Clobetasol Propionate, Gentamycin, Miconazole, or to any of the excipients listed in section 6.1.

The following conditions should not be treated with Mixiderm:
• Rosacea
• Untreated cutaneous infections

- Acne vulgaris
- Pruritus without inflammation
- Perioral dermatitis
- Perianal and genital pruritus

Clobetasol is contraindicated in dermatoses in children under one year of age, including dermatitis and nappy eruptions.

4.4 Special warnings and precautions for use

Cases of osteonecrosis serious infections and systemic immunosuppression have been reported with long-term use of clobetasol propionate beyond the recommended doses.

Clobetasol should be used with caution in patients with a history of local hypersensitivity to other corticosteroids or to any of the excipients in the preparation. Local hypersensitivity reactions may resemble symptoms of the condition under treatment.

Manifestations of hypercortisolism (Cushing's syndrome) and reversible hypothalamic-pituitary-adrenal (HPA) axis suppression, leading to glucocorticosteroid insufficiency, can occur in some individuals as a result of increased systemic absorption of topical steroids. If either of the above are observed, withdraw the drug gradually by reducing the frequency of application, or by substituting a less potent corticosteroid. Abrupt withdrawal of treatment may result in glucocorticosteroid insufficiency.

Children are more susceptible to develop atrophic changes with the use of topical corticosteroids.

Bacterial infection is encouraged by the warm, moist conditions within skin folds or caused by occlusive dressings. When using occlusive dressings, the skin should be cleansed before a fresh dressing is applied.

Topical corticosteroids should be used with caution in psoriasis as rebound relapses, development of tolerances, risk of generalised pustular psoriasis and development of local or systemic toxicity due to impaired barrier function of the skin have been reported in some cases. If used in psoriasis careful patient supervision is important.

Application to the face is undesirable as this area is more susceptible to atrophic changes. If used on the face, treatment should be limited to 5 days.
If applied to the eyelids, care is needed to ensure that the preparation does not enter the eye, as cataract and glaucoma might result from repeated exposure. If clobetasol does enter the eye, the affected eye

should be bathed in copious amounts of water.
Visual disturbance has been reported with systemic and topical corticosteroid use. If a patient presents with symptoms such as blurred vision or other visual disturbances, the patient should be considered for referral to an ophthalmologist for evaluation of possible causes which may include cataract, glaucoma or rare diseases such as central serous chorioretinopathy (CSCR) which have been reported after use of systemic and topical corticosteroids.
Mixiderm cream contains paraffin. Instruct patients not to smoke or go near naked flames due to the risk of severe burns. Fabric (clothing, bedding, dressings etc) that has been in contact with this product burns more easily and is a serious fire hazard. Washing clothing and bedding may reduce product build-up but not totally remove it.

Long term use of topical steroids can result in the development of rebound flares after stopping treatment (topical steroid withdrawal syndrome). A severe form of rebound flare can develop which takes the form of a dermatitis with intense redness, stinging and burning that can spread beyond the initial treatment area. It is more likely to occur when delicate skin sites such as the face and flexures are treated. Should there be a reoccurrence of the condition within days to weeks after successful treatment a withdrawal reaction should be suspected. Reapplication should be with caution and specialist advise is recommended in these cases or other treatment options should be considered.

The use of topical antibiotics occasionally allows overgrowth of nonsusceptible organisms, including fungi. If this condition occurs, or if irritation, sensitization or superinfection develops, treatment with gentamicin sulfate should be discontinued and appropriate therapy instituted.
Miconazole Cream must not come into contact with the mucosa of the eyes. Severe hypersensitivity reactions, including anaphylaxis and angioedema, have been reported during treatment with miconazole topical formulations. If a reaction suggesting hypersensitivity or irritation should occur, the treatment should be discontinued.

4.5 Interactions with other medicines and other forms of interactions

Co-administered drugs that can inhibit CYP3A4 (e.g. ritonavir and itraconazole) have been shown to inhibit the metabolism of corticosteroids leading to increased systemic exposure. The extent to which this interaction is clinically relevant depends on the dose and route of administration of the corticosteroids and the potency of the CYP3A4 inhibitor.

Miconazole administered systemically is known to inhibit CYP3A4/2C9. Due to the limited systemic availability after topical application, clinically relevant interactions are rare. However, in patients on oral anticoagulants, such as warfarin, caution should be exercised and anticoagulant effect should be monitored.

4.6 Fertility, pregnancy and lactation

Pregnancy

There is inadequate evidence of safety in human pregnancy. Topical administration of corticosteroids to pregnant animals can cause abnormalities of fetal development. The relevance of this finding to humans has not been established, therefore, topical steroids should not be used extensively in pregnancy, i.e. in large amounts or for prolonged periods.

In animals Miconazole nitrate has shown no teratogenic effects but is foetotoxic at high oral doses. Only small amounts of Miconazole nitrate are absorbed following topical administration. However, as with other imidazole's, Miconazole nitrate should be used with caution during pregnancy.

Lactation

The safe use of Clobetasol propionate during lactation has not been established.

Topically applied Miconazole is minimally absorbed into the systemic circulation, and it is not known whether Miconazole is excreted in human breast milk. Caution should be exercised when using topically applied Miconazole products during lactation.

4.7 Effects on ability to drive and use machines

There have been no studies to investigate the effect of clobetasol on driving performance or the ability to operate machinery. A detrimental effect on such activities would not be anticipated from the adverse reaction profile of topical clobetasol. Miconazole has no influence on the ability to drive and use machines.

4.8 Undesirable effects

Clobetasol Propionate:

Adverse drug reactions (ADRs) are listed below by MedDRA system organ class and by frequency. Frequencies are defined as: very common (≥1/10), common (≥1/100 and <1/10), uncommon (≥1/1,000 and <1/100), rare (≥1/10,000 and <1/1,000) and very rare (<1/10,000), including isolated reports.

Post-marketing data

Infections and Infestations	

Very rare	Opportunistic infection
Immune System Disorders	
Very rare	Hypersensitivity, generalised rash
Endocrine Disorders	
Very rare	Hypothalamic-pituitary adrenal (HPA) axis suppression: Cushingoid features: (e.g. moon face, central obesity), delayed weight gain/growth retardation in children, osteoporosis, hyperglycaemia/glucosuria, hypertension, increased weight/obesity, decreased endogenous cortisol levels, alopecia, trichorrhexis
Skin and Subcutaneous Tissue Disorders	
Common	Pruritus, local skin burning /skin pain
Uncommon	Skin atrophy*, striae*, telangiectasias*
Very rare	Skin thinning*, skin wrinkling*, skin dryness*, pigmentation changes*, hypertrichosis, exacerbation of underlying symptoms, allergic contact dermatitis/dermatitis, pustular psoriasis, erythema, rash, urticaria, acne
Not known	Withdrawal reactions - redness of the skin which may extend to areas beyond the initial affected area, burning or stinging sensation, itch, skin peeling, oozing pustules.
General Disorders and Administration Site Conditions	
Very rare	Application site irritation/pain
Eye disorders	
Very rare	Cataract, central serous chorioretinopathy, glaucoma
Not known (cannot be estimated from available data):	Vision, blurred

**Skin features secondary to local and/or systemic effects of hypothalamic-pituitary adrenal (HPA) axis suppression.*

Gentamycin:

In patients with dermatoses treated with gentamicin Sulfate, irritation (erythema and pruritis) that did not usually require discontinuance of treatment has been reported in a small percentage of cases. There was

no evidence of irritation or sensitization, however, in any of these patients patch-tested subsequently with gentamicin Sulfate on normal skin.

Possible photosensitization has been reported in several patients but could not be elicited in these patients by reapplication of gentamicin sulfate followed by exposure to ultraviolet radiation.

Miconazole Nitrate:

The displayed frequency categories use the following convention: very common (≥1/10);common (≥1/100 to <1/10);Uncommon (≥1/1,000 to <1/100);rare (≥1/10,000 to <1/1,000); and very rare (< 1/10,000, including isolated reports) and Not Known (cannot be estimated from the available data).

Table A: Adverse Reactions Reported in Clinical Trials and Post marketing Experience

System Organ Class	**Adverse Reactions**	
	Frequency Category	
	Uncommon (≥1/1,000 to <1/100)	**Not Known**
Immune System Disorders		Anaphylactic reaction Hypersensitivity
Skin and Subcutaneous Tissue Disorders	Skin burning sensation Skin inflammation	Angioedema Urticaria Contact dermatitis Rash Erythema Pruritus
General Disorders and Administration Site Conditions	Application site reactions (including application site irritation, burning, pruritus, reaction NOS and warmth)	

<u>Reporting of suspected adverse reactions</u>

Reporting suspected adverse reactions: Healthcare professionals are requested to report any suspected adverse reactions via the National Regulatory Authority.

4.9 Overdose

Clobetasol Propionate

Acute overdosage is very unlikely to occur, however, in the case of chronic overdosage or misuse, the features of hypercortisolism may appear and in this situation topical steroids should be reduced or discontinued gradually, under medical supervision.

Gentamicin

Acute overdosage of topical gentamicin is very unlikely to occur. If this is suspected, use of the product should be stopped and the patient's general status, hearing acuity, renal and neuromuscular functions should be monitored. Hemodialysis may reduce the serum level of gentamycin.

Miconazole Nitrate:

Cutaneous use: Excessive use can result in skin irritation, which usually disappears after discontinuation of therapy. Miconazole Cream 2% w/w is intended for cutaneous use, not for oral use. If accidental ingestion of large quantities of the product occurs, use appropriate supportive care.

5. Pharmacological properties

5.1 Pharmacodynamics properties

Clobetasol propionate is a topical corticosteroids that acts as anti-inflammatory agent via multiple mechanisms to inhibit late phase allergic reactions including decreasing the density of mast cells, decreasing chemotaxis and activation of eosinophils, decreasing cytokine production by lymphocytes, monocytes, mast cells and eosinophils, and inhibiting the metabolism of arachidonic acid.
Gentamicin is a bactericidal aminoglycoside antibiotic. When applied as a cream, it stops bacterial growth on the skin by irreversibly binding to the 30S ribosomal subunit. This action disrupts protein translation and causes the bacteria to produce faulty cell membranes, leading to cell death.
Miconazole nitrate is an imidazole antifungal agent and may act by interfering with the permeability of the fungal cell membrane. It possesses a wide antifungal spectrum and has some antibacterial activity.

5.2 Pharmacokinetic properties

Absorption:

Percutaneous penetration of clobetasol propionate varies among individuals and can be increased by the use of occlusive dressings, or when the skin is inflamed or diseased. There is little absorption through skin or mucous membranes when miconazole nitrate is applied topically.
Distribution: Absorbed miconazole is bound to plasma proteins

(88.2%) and red blood cells (10.6%). Less than 10% of gentamicin is bound to plasma proteins

Metabolism and Excretion: Once absorbed through the skin, topical corticosteroids are handled through pharmacokinetic pathways similar to systemically administered corticosteroids. They are metabolised, primarily in the liver and then excreted by the kidneys. The small amount of miconazole that is absorbed is eliminated predominantly in faeces as both unchanged drug and metabolites. Elimination half-life of gentamicin is 2-3 hours in individuals with normal kidney function, but can be increased in cases of renal insufficiency. Greater than 90% of gentamicin is excreted in the urine by glomerular filtration.

5.3 Preclinical safety data

Long-term animal studies have not been performed to evaluate the carcinogenic potential of clobetasol propionate.Clobetasol propionate was not mutagenic in a range of in vitro bacterial cell assays.

In fertility studies, subcutaneous administration of clobetasol propionate to rats at doses of 6.25 to 50 micrograms/kg/day produced no effects on mating, and fertility was only decreased at 50 micrograms/kg/day.

Subcutaneous administration of clobetasol propionate to mice (≥100 micrograms/kg/day), rats (400 micrograms/kg/day) or rabbits (1 to 10 micrograms/kg/day) during pregnancy produced foetal abnormalities including cleft palate and intrauterine growth retardation.

In the rat study, where some animals were allowed to litter, developmental delay was observed in the F1 generation at ≥100 micrograms/kg/day and survival was reduced at 400 micrograms/kg/day. No treatment-related effects were observed in F1 reproductive performance or in the F2 generation.

Preclinical data reveal no special hazard for humans based on conventional studies of local irritation, single and repeated dose toxicity, genotoxicity, and toxicity to reproduction for miconazole.

6.Pharmaceutical particulars

6.1 List of Excipients:

Liquid paraffin (Heavy), Hard paraffin Wax, Cetosteryl Alcohol, Microcrystalline E Wax, Sodium Methyl Paraben, Sodium Propyl Paraben, Cetomicrocol-1000, Propylene Glycol, Sorbitol Solution 70%, Citric Acid Mono, DM Water

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

36 Months

6.4 Special precautions for storage

Store below 30°C.

6.5 Nature and contents of container

15g tube.

6.6 Special precautions for disposal and other handling

None stated.

7Marketing Authorization Holder and Manufacturing Site Address

Marketing Authorization Holder:

Krishna Chemists Limited
Industrial area, Lusaka road,
3rd floor, Metrix hardware,
P.O. Box:3328-00506, Nairobi Country: Kenya

Manufactured in India by:

RELAX BIOTECH PVT. LTD.
862/1, GIDC, Makarpura,
Vadodara-390010, Gujarat, India.

8Marketing Authorization Number

CTD11424

9.Date of first Registration/ Renewal of the Registration

10/05/2026

10. Date of Revision of the Text

10/05/2026