

Antifungal Agents

CLOTRIMAZOLE, TOPICAL

(kloe-trye-ma-zole) Lotrimin®

Indications/Actions

Topical clotrimazole has activity against dermatophytes and yeasts; it may be useful for localized lesions associated with *Malassezia*. It is not very effective in treating dermatophytosis in cats.

Clotrimazole inhibits the biosynthesis of ergosterol, a component of fungal cell membranes leading to increased membrane permeability and probable disruption of membrane enzyme systems.

Precautions/Adverse Effects

Avoid contact with eyes and mucous membranes. Clients should wash hands after application or wear gloves when applying.

Skin irritation is possible, but unlikely to occur.

Clotrimazole Topical Veterinary-Labeled Products

Note: There are several products containing clotrimazole for otic use; refer to that section for more information.

Product (Company)	Form: Concentration	Label Status	Other Ingredients; Size(s)
Clotrimazole Solution (Vet Solutions, Butler, Vedco)	Solution: 1%	Rx (Vet)	30 mL.

Clotrimazole Topical Human-Labeled Products

In addition to the products listed below, there vaginal creams and suppositories, and oral 10 mg troches.

Product (Company)	Form: Concentration	Label Status	Other Ingredients; Size(s)
Clotrimazole (various); Cruex ® (Novartis); Lotrimin AF ® (Schering-P); Desenex ® (Novartis)	Solution: 1%	OTC/Rx (Human). Status determined by labeling	Depending on product: 105 – 113 mL.
Lotrimin AF ® (Schering-P);	Lotion: 1%	OTC (Human)	20 mL.
Clotrimazole & Betamethasone Diprop. (Fougera) Lotrisone ® (Schering)	Lotion: Clotrimazole 1% Betamethasone dip. 0.05%	Rx (Human)	30 mL.
Clotrimazole (various); Lotrimin AF ® (Schering-P);	Cream: 1%	OTC/Rx (Human). Status determined by labeling	Depending on product: 10, 30 mL.
Clotrimazole & Betamethasone Diprop. (Fougera) Lotrisone ® (Schering)	Cream: Clotrimazole 1% Betamethasone dip. 0.05%	Rx (Human)	15, 45 g.

ENILCONAZOLE

(ee-nil-kon-a-zole)

Indications/Actions

Although no dosage forms are currently commercially available for topical use in the USA, Enilconazole is used topically for treating dermatophytosis in small animals and horses using compounded products. A commercially available topical rinse *Imaverol*® (Janssen) 10% is available with canine, bovine and equine use labeling in many countries. Intranasal instillation of enilconazole after plaque debridement has also been shown useful in treating nasal aspergillosis in small animals.

Use of topical enilconazole on cats with dermatophytosis is somewhat controversial as there are apparently no products with feline labeling available in Europe or Canada. There are preliminary reports of safely and successfully using enilconazole on dermatophytic cats in combination with oral itraconazole.

A topical product and a poultry environmental disinfectant product (*Clinafarm EC*®) is available in the USA. It is technically illegal to use this product other than it is labeled; it is an EPA licensed product in the USA.

Precautions/Adverse Effects

Avoid contact with eyes. Clients should wear gloves when applying and use eye protection.

When used topically in cats, hypersalivation, vomiting, anorexia/weight loss, muscle weakness, and a slight increase in serum ALT levels have been reported.