Pregnancy Category B
Reproduction studies have been performed in the mouse, rat, rabbit, and monkey, via various routes of administration, at doses 10 times or more the topical human dose and have revealed no significant evidence of impaired fertility or harm to the fetus due to ciclopirox. There are, however, no adequate or well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers
It is not known whether this drug is excreted in human milk. Caution should be exercised when LOPROX (ciclopirox) Lotion is administered to a nursing woman.

Pediatric Use
Safety and effectiveness in pediatric patients below the age of 10 years have not been established.

ADVERSE REACTIONS
In the controlled clinical trial with 89 patients using LOPROX Lotion and 89 patients using the vehicle, the incidence of adverse reactions was low. Those considered possibly related to treatment or occurring in more than one patient were pruritus, which occurred in two patients using ciclopirox lotion and one patient using the lotion vehicle, and burning, which occurred in one patient using ciclopirox lotion.

DOSAGE AND ADMINISTRATION
Gently massage LOPROX (ciclopirox) Lotion into the affected and surrounding skin areas twice daily, in the morning and evening. Clinical improvement with relief of pruritus and other symptoms usually occurs within the first week of treatment. If a patient shows no clinical improvement after four weeks of treatment with LOPROX Lotion the diagnosis should be redetermined. Patients with tinea versicolor usually exhibit clinical and mycological clearing after two weeks of treatment.

HOW SUPPLIED
LOPROX Lotion is supplied in 30 mL bottles (NDC 0039-0191-30), 60 mL bottles (NDC 0039-0191-06).
Bottle space provided to allow for vigorous shaking before each use.
Store between 41° and 77°F (5° and 25°C).
Caution: Federal law prohibits dispensing without prescription.

Loprox REG TM HOECHST AG
Prescribing Information as of December 1997

Hoechst
Hoechst-Roussel Pharmaceuticals
Division of Hoechst Marion Roussel, Inc.
Kansas City, MO 64137

50016051

SPECIMEN

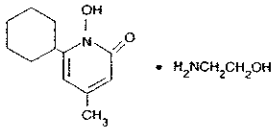
Prescribing Information as of December 1997

LOPROX®
(ciclopirox)

Lotion 0.77%

FOR DERMATOLOGIC USE ONLY.
NOT FOR USE IN EYES.

DESCRIPTION
LOPROX® (ciclopirox) Lotion 0.77% is for topical use.
Each gram of LOPROX Lotion contains 7.70 mg of ciclopirox (as ciclopirox olamine) in a water miscible lotion base consisting of purified water USP, cocamide DEA, octyldodecanol NF, mineral oil USP, stearyl alcohol NF, cetyl alcohol NF, polysorbate 60 NF, myristyl alcohol NF, sorbitan monostearate NF, lactic acid USP, and benzyl alcohol NF (1%) as preservative.
LOPROX Lotion contains a synthetic, broad-spectrum, antifungal agent ciclopirox (as ciclopirox olamine). The chemical name is 6-cyclohexyl-1-hydroxy-4-methyl-2(1*H*)-pyridone, 2-aminoethanol salt.
The CAS Registry Number is 41621-49-2.
The chemical structure is:



LOPROX Lotion has a pH of 7.

CLINICAL PHARMACOLOGY
Ciclopirox is a broad-spectrum, antifungal agent that inhibits the growth of pathogenic dermatophytes, yeasts, and *Malassezia furfur.* Ciclopirox exhibits fungicidal activity *in vitro* against isolates of *Trichophyton rubrum, Trichophyton mentagrophytes, Epidermophyton floccosum, Microsporum canis,* and *Candida albicans.*
Pharmacokinetic studies in men with radiolabeled ciclopirox solution in polyethylene glycol 400 showed an average of 1.3% absorption of the dose when it was applied topically to 750 cm^2 on the back followed by occlusion for 6 hours. The biological half-life was 1.7 hours and excretion occurred via the kidney. Two days after application only 0.01% of the dose applied could be found in the urine. Fecal excretion was negligible. Autoradiographic studies with human cadaver skin showed that ciclopirox penetrates into the hair and through the epidermis and hair follicles into the sebaceous glands and dermis, while a portion of the drug remains in the stratum corneum.
In vitro penetration studies in frozen or fresh excised human cadaver and pig skin indicated that the penetration of LOPROX (ciclopirox) Lotion is equivalent to that of LOPROX Cream. Therapeutic equivalence of cream and lotion formulations also was indicated by studies of experimentally induced guinea pig and human trichophytosis.

INDICATIONS AND USAGE
LOPROX (ciclopirox) Lotion is indicated for the topical treatment of the following dermal infections: tinea pedis, tinea cruris and tinea corporis due to *Trichophyton rubrum, Trichophyton mentagrophytes, Epidermophyton floccosum,* and *Microsporum canis;* cutaneous candidiasis (moniliasis) due to *Candida albicans;* and tinea (pityriasis) versicolor due to *Malassezia furfur.*

CONTRAINDICATIONS
LOPROX Lotion is contraindicated in individuals who have shown hypersensitivity to any of its components.

WARNINGS
General
LOPROX Lotion is not for ophthalmic use.

PRECAUTIONS
If a reaction suggesting sensitivity or chemical irritation should occur with the use of LOPROX Lotion, treatment should be discontinued and appropriate therapy instituted.

Information for Patients
The patient should be told to:
1. Use the medication for the full treatment time even though signs/symptoms may have improved and notify the physician if there is no improvement after four weeks.
2. Inform the physician if the area of application shows signs of increased irritation (redness, itching, burning, blistering, swelling, oozing) indicative of possible sensitization.
3. Avoid the use of occlusive wrappings or dressings.

Carcinogenesis, Mutagenesis, Impairment of Fertility
A carcinogenicity study in female mice dosed cutaneously twice per week for 50 weeks followed by a 6-month drug-free observation period prior to necropsy revealed no evidence of tumors at the application site. The following *in vitro* and *in vivo* genotoxicity tests have been conducted with ciclopirox olamine: studies to evaluate gene mutation in the Ames *Salmonella*/Mammalian Microsome Assay (negative) and Yeast Saccharomyces Cerevisiae Assay (negative) and studies to evaluate chromosome aberrations *in vivo* in the Mouse Dominant Lethal Assay and in the Mouse Micronucleus Assay at 500 mg/kg (negative). The following battery of *in vitro* genotoxicity tests were conducted with *ciclopirox:* a chromosome aberration assay in V79 Chinese Hamster Cells, with and without metabolic activation (positive); a gene mutation assay in the HGPRT - test with V79 Chinese Hamster Cells (negative); and a primary DNA damage assay (i.e., unscheduled DNA Synthesis Assay in A549 Human Cells (negative)). An *in vitro* Cell Transformation Assay in BALB/C3T3 Cells was negative for cell transformation. In an *in vivo* Chinese Hamster Bone Marrow Cytogenetic Assay, ciclopirox was negative for chromosome aberrations at 5000 mg/kg.

NDC 0039-0191-30

N 3 0039-0191-30 3

Loprox® 30 mL

(ciclopirox)

Lotion 0.77% (W/W)

FOR DERMATOLOGIC USE ONLY.
NOT FOR USE IN EYES.

Bottle space provided to allow for vigorous shaking before each use.

Keep this and all medication out of the reach of children.

Each gram contains: 7.70 mg ciclopirox in a water miscible lotion base consisting of purified water USP, cocamide DEA, octyldodecanol NF, mineral oil USP, stearyl alcohol NF, cetyl alcohol NF, polysorbate 60 NF, myristyl alcohol NF, sorbitan monostearate NF, lactic acid USP, and benzyl alcohol NF (1%) as a preservative.

NDC 0039-0191-30

N 3 0039-0191-30 3

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NDC 0039-0191-30

30 mL

Loprox®
(ciclopirox)
Lotion 0.77% (w/w)

FOR DERMATOLOGIC USE ONLY.
NOT FOR USE IN EYES.
Rx ONLY.

Bottle space provided to allow for vigorous shaking before each use.

Keep this and all medication out of the reach of children.

SPECIMEN 50018451

Read package insert for Usual Dosage, ingredients and full prescribing information.
Store between 41° and 77° F (5° and 25° C).

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Mfd by:
Paco Pharmaceutical Services Inc.
Lakewood, NJ 08701
Mfd for:
HOECHST-ROUSSEL Pharmaceuticals
Division of Hoechst Marion Roussel, Inc.
Kansas City, MO 64137 USA

REG TM HOECHST AG

*US Patent 3,883,545

50014132

Lot:

Exp: SPECIMEN

NDC 0039-0191-06

N 3 0039-0191-06 8

60 mL

Loprox®

(ciclopirox)

Lotion 0.77% (W/W)

FOR DERMATOLOGIC USE ONLY.
NOT FOR USE IN EYES.

Bottle space provided to allow for vigorous shaking before each use.

Keep this and all medication out of the reach of children.

Each gram contains: 7.70 mg ciclopirox in a water miscible lotion base consisting of purified water USP, cocamide DEA, octyldodecanol NF, mineral oil USP, stearyl alcohol NF, cetyl alcohol NF, polysorbate 60 NF, myristyl alcohol NF, sorbitan monostearate NF, lactic acid USP, and benzyl alcohol NF (1%) as a preservative.

NDC 0039-0191-06

N 3 0039-0191-06 8

60 mL

Loprox®

(ciclopirox)

Lotion 0.77% (W/W)

FOR DERMATOLOGIC USE ONLY.
NOT FOR USE IN EYES.

Bottle space provided to allow for vigorous shaking before each use.

Keep this and all medication out of the reach of children.

Each gram contains: 7.70 mg ciclopirox in a water miscible lotion base consisting of purified water USP, cocamide DEA, octyldodecanol NF, mineral oil USP, stearyl alcohol NF, cetyl alcohol NF, polysorbate 60 NF, myristyl alcohol NF, sorbitan monostearate NF, lactic acid USP, and benzyl alcohol NF (1%) as a preservative.

KEARNY 58

10

NDC 0039-0191-06

Loprox® **60 mL**

(ciclopirox)

Lotion 0.77% (w/w)

FOR DERMATOLOGIC USE ONLY.
NOT FOR USE IN EYES.
Rx ONLY.

Bottle space provided to allow for vigorous shaking before each use.

Keep this and all medication out of the reach of children.

See insert for Usual Dosage, ingredients and full prescribing information.

Store between 41° and 77° F (5° and 25° C).

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HOECHST-ROUSSEL Pharmaceuticals
Division of Hoechst Marion Roussel, Inc.
Kansas City, MO 64137 USA

*US Patent 3,883,545 50018470

Lot: SPECIMEN

Exp:

KEARNY 58

10