

Lorix®

Permethrin

Description: Permethrin (**Lorix®**) is a photostable synthetic pyrethroid that possesses a broad spectrum of insecticidal activity and low mammalian toxicity.

Mode of action: The insect rapidly absorbs Permethrin (**Lorix®**) via mouth, respiratory tract or the intact cuticle. Although the primary target tissue is the nervous system, insects are not killed by dysfunction of a single organ but by a complex series of reactions in various organs, such as metabolic exhaustion and paralysis of the nervous system. Permethrin primarily affects sodium channels in the nerve membrane and causes prolongation of the transient increase in sodium permeability associated with membrane depolarization. After treatment with permethrin, the sodium current is evoked by a step depolarization of the membrane. This leads to sensory hyperexcitability, incoordination and prostration. It is assumed that mode of action against mites is similar.

Pharmacokinetics: The only approved route of administration is the topical route and there are few human data available on systemic exposure or kinetics following permethrin application to the skin. Some presystemic metabolism occurs in skin. Less than 0.5% of applied permethrin is absorbed during the first 48 hours. Absorbed permethrin is rapidly metabolized by ester hydrolysis, most likely in the liver and the products are excreted primarily in the urine.

Composition:

Lorix® cream contains 5% w/w permethrin INN in a smooth, white, water miscible base.

Indications: Permethrin (**Lorix®**) cream is indicated for the treatment of scabies and crab lice infestations (Pediculosis).

Dosage and administration: The following table indicates the approximate amount of cream to be used as single application :

Adults and children: over 12 years: Up to 1 tube
 Children aged: 5-12 years: Up to 1/2 of a tube
 1-5 years: Up to 1/4 of a tube
 2 months – 1 year: Up to 1/8 of a tube

A few adults may need more than one tube (30 gm of cream) for whole body application. However the maximum amount of Lorix cream used in one application should be limited up to two tubes (60 gm of cream).

Treatment procedure: Before application of **Lorix®** cream the skin should be clean, cool and dry. Do not have a hot shower or bath before applying. *For adults and children over 2 years:* Apply the cream to the whole body from the neck down, rubbing lightly into the skin until the cream disappears. It is important to include all skin surfaces, such as between the fingers and toes, under the nails and on the soles of the feet. *For babies under 2 years:* Apply to the face, neck, ears and scalp as well, only avoiding the area immediately around the eyes and mouth. Leave cream on for at least 8h, before washing off. Reapply to any area that may be washed during the 8h treatment time (such as after washing the hands).

Contraindications: Permethrin (**Lorix®**) cream is contraindicated in individuals with a known allergy to permethrin, its components, other pyrethroids or pyrethrins.

Side effects: Contact dermatitis with mild erythematous vesicular lesions and papules has occasionally been reported.

Precaution: Permethrin is irritant to the eyes. Avoid contact of permethrin cream with the eyes. When applying permethrin cream to the face in children, care should be taken when applying to areas close to the eyes and mouth, where it may be licked off. Nursing staff who routinely comes in contact with the cream may wear gloves to avoid any possible irritation to the hands.

Use in pregnancy and lactation: In the absence of specific studies in pregnant women its use in pregnancy should only follow medical advice. However, teratogenic effects would not be anticipated. Although caution should be exercised in administration of permethrin to nursing mothers, levels in breast milk following topical application are likely to be very low.

Drug interactions: None is known.

Storage: Store at a temperature not exceeding 30°C, protected from light. Freezing should be avoided.

Packaging: Each tube contains 15 gm/30 gm cream.

Scabies

- If one is infected, other family members are likely to be infected.
- If one is infected, all family members have to be treated at the same time.

Lorix® Cream

Permethrin INN 5%

One step solution for Scabies

Dosage and administration

Age	Dose
Adults & Children over 12 years	1 tube
Children aged 5-12 years	Up to 1/2 of a tube
Children aged 1-5 years	Up to 1/4 of a tube
Children aged 2 months – 1 year	Up to 1/8 of a tube

In case of adult, more than two **Lorix®** tubes are not recommended.

Treatment procedure

- ◆ Before application of **Lorix®** cream, the body should be dried well after a complete bath. In addition all the clothing of the family has to be boiled using detergent.
- ◆ For adults & children over 2 years: Apply the cream to the whole body from the neck down, rubbing lightly into the skin until the cream disappears. Especially the cream should apply in between the fingers and toes, all the curves of the body and outside of sex organ.
- ◆ For babies under 2 years: Apply to the face, neck, ears and scalp as well, avoiding the area immediately around the eyes and mouth so that cream do not enter inside eyes and mouth.
- ◆ After 8-24 hours later of the application of **Lorix®** cream, wash the whole body using hot water and soap. It should be reapplied to the hand if the hand is being washed during 8 hours period.
- ◆ If necessary, **Lorix®** cream may be used again according to the suggestion of the physician following the previous guideline.

