

# Silvederma Cream

## Silver sulfadiazine

### 1. QUALITATIVE AND QUANTITATIVE COMPOSITION:

Each 1 g of cream contains: Silver sulfadiazine, 10 mg.

Excipients: Propylene glycol, 50 mg, Cetosteryl alcohol, 80 mg. For a complete list of excipients, see section 5.1.

### 2. PHARMACEUTICAL FORM:

Cream. The cream is white or off-whitish.

### 3. CLINICAL PARTICULARS:

#### 3.1 Therapeutic indications:

SILVEDERMA is indicated in the treatment and prevention of infection in second- and third-degree burns, and in venous and pressure ulcers.

Official recommendations on the suitable use and prescription of antibacterials must be considered.

#### 3.2 Posology and method of administration:

The wound must first be properly washed and cleaned. Then, using a sterile spatula or sterile glove, apply a 3 mm layer on the surface of the wound and cover with a suitable dressing. The severity of the infection and type of lesion to be treated will determine how often the dressing must be changed, from 1-2 times a day for burns and wounds without much contamination, up to every 4-6 hours for very contaminated wounds. Every time the dressing is changed and more cream is applied, any remaining cream from the previous application must first be removed by carefully washing the wound with lukewarm boiled water or normal saline solution. Treatment must not be suspended while there is the possibility of infection. This product should be administered with precaution in patients with impaired renal or liver function (see section 3.4). Each container should be used by a single patient.

#### 3.3 Contraindications:

Known hypersensitivity to silver sulfadiazine, sulphonamides or to any of the excipients. Due to the risk of kernicterus, silver sulfadiazine should not be used in newborns, premature infants, pregnant females at term or during the lactation period, when the extension of the wounds may anticipate extensive systemic absorption.

#### 3.4 Special warnings and precautions for use:

Special precaution should be taken in patients with impaired renal or liver function due to the risk of medicine accumulation; in these cases applying the product to open wounds with a large surface area should be avoided, especially ulcers. Precaution should also be taken in case of injury to liver parenchyma. In case of leukopenia, a control leukocyte count should be performed. Precaution is recommended in patients with glucose-6-phosphate dehydrogenase deficiency, as it may cause hemolysis. Under the influence of sunlight, there may local skin discolouration and grey colouration of the cream, and therefore areas treated with SILVEDERMA should not be exposed to direct sunlight.

#### 3.5 Interaction with other medicinal products and other forms of interaction:

No interaction studies have been carried out.

#### 3.6 Fertility, pregnancy and lactation:

No studies have been carried out in pregnant females. Animal studies do not show direct or indirect harmful effects to the pregnancy, embryo-foetal development, birth or post-natal development (see section 4.3). Silver sulfadiazine should not be used in newborns, premature infants, pregnant females at term or during the lactation period due to the risk of kernicterus (see section 4.3).

#### 3.7 Effects on ability to drive and use machines:

No specific studies have been carried out, but it is unlikely that silver sulfadiazine has any effect on the ability to drive vehicles or use machines. Nevertheless, precaution is recommended until response to therapy is well established.

#### 3.8 Undesirable effects:

Adverse effects attributed to the application of silver sulfadiazine are observed in approximately 2% of patients and are generally mild and temporary. The following adverse effects were reported in clinical trials, in order of their frequency and organ system, using the following class% cation: very common (≥1/10); common (≥1/100, <1/10); uncommon (≥1/1,000, <1/100); rare (≥1/10,000, <1/1,000); very rare (<1/10,000). Blood and lymphatic system disorders: Very common: Leukopenia. In addition to the adverse reactions described in clinical trials, the following adverse reactions have been compiled during post-marking experience: Skin and subcutaneous tissue disorders: Very rare: Eczema, allergic dermatitis, skin discolouration due to photosensitivity. As skin absorption is possible, especially in open wounds, the risk of general sulphonamide systemic effects or complications cannot be excluded: haematological, renal, intestinal and skin complications, with a greater risk of onset in patients with impaired renal and liver function. Some reports suggest an increase in serum osmolarity produced by propylene glycol absorption when a large amount of SILVEDERMA is applied to wounds with a very large surface area.

#### 3.9 Overdose:

The administration of long-term high doses of silver sulfadiazine caused serum silver levels, which subsided after suspending treatment.

### 4. PHARMACOLOGICAL PROPERTIES:

#### 4.1 Pharmacodynamic properties:

Pharmacotherapeutic group: Topical sulphonamides alone. ATC code: D06B A01 Chemotherapeutics for topical use. Sulphonamides: Silver sulfadiazine. Colonization of the burn, followed by sepsis, is the main complication in burn patients. The local treatment of choice for burns is initial surgical excision and skin graft and/or reduction of the colonization through the application of antibiotics. The topical application of silver sulfadiazine reduces microbial infiltration. The mechanism of action of the medicine is, on the one hand, sulfadiazine (bacteriostatic as a folic acid synthesis inhibitor), and on the other, the silver ion (bactericide due to a reaction with thiol groups and other protein groups which it denatures; and the astringent activity of the antibacterial). Silver sulfadiazine has a bactericide and bacteriostatic action against gram-positive and gram-negative bacteria, particularly against Staphylococcus aureus, Pseudomonas aeruginosa, Aerobacter aerogenes and Klebsiella pneumoniae.

#### 4.2 Pharmacokinetic properties:

Silver and sulfadiazine are slowly released from silver sulfadiazine after being applied to the wound. Absorption is less than 10% of sulfadiazine, which is subsequently eliminated via the urine. Urinary concentration is from 6-40 mg/100 ml. Plasma concentrations between 10-20 µg/ml have been obtained, but higher concentrations may be obtained when treating more extensive body surfaces. The maximum absorption of silver is less than 1% of the silver content of the cream.

#### 4.3 Preclinical safety data:

Toxicological studies in rats, guinea pigs and rabbits do not reveal systemic effects after topical application. Chronic treatment with silver sulfadiazine may cause silver deposits (argyria) in the organs. Teratological studies in rats and rabbits did not show any signs of teratogenic potential.

### 5. PHARMACEUTICAL PARTICULARS:

#### 5.1 List of excipients:

Cetosteryl alcohol, White petroleum jelly, Isopropyl myristate, Propylene glycol, Polyoxyl 40 stearate, Sorbitan oleate, Methylparaben, Purified water.

#### 5.2 Incompatibilities:

Not applicable.

#### 5.3 Shelf life:

3 years.

#### 5.4 Special precautions for storage:

No special storage conditions are required. Store in the original packaging to protect from light.

#### 5.5 Nature and contents of container:

Polyethylene tube with 50 g and 100 g of cream. Polypropylene jar with 500 g of cream (clinical container).

#### 5.6 Special precautions for disposal:

No special precautions.

### 6. MARKETING AUTHORIZATION HOLDER:

Laboratorio ALDO-UNIÓN, S.L. Baronesa de Maldá, 73. 08950 Espplugues de Llobregat. BARCELONA (SPAIN).

### 7. MARKETING AUTHORIZATION NUMBER:

49.750.

### 8. DATE OF THE FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION:

10 January 1972.

### 9. DATE OF REVISION OF THE TEXT:

May 2007