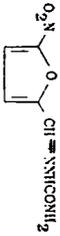


CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

ANDA 86-766

APPROVED LABELING



5-Nitro-2-furaldehyde semicarbazone

NITROFURAZONE OINTMENT 0.2%

DESCRIPTION: A water soluble ointment containing 0.2% nitrofurazone and the following polyethylene glycols: Polyethylene Glycol 400 U.S.P. 65%, Polyethylene Glycol 4000 U.S.P. 34.8%.

ACTIONS: Nitrofurazone is a synthetic nitrofuran with a broad antimicrobial spectrum. It is bactericidal against most bacteria commonly causing surface infections, including many that have become antibiotic resistant. It acts by inhibiting enzymes necessary for carbohydrate metabolism in bacteria. This action occurs in both the aerobic, anaerobic, and facultative bacteria. Topically it is without appreciable toxicity to human cells.

INDICATIONS: Nitrofurazone is a topical antibacterial agent indicated for adjunctive therapy of patients with second and third degree burns when bacterial resistance to other agents is a real or potential problem. It is also indicated in skin grafting where bacterial contamination may cause graft rejection and/or donor site infection particularly in hospitals with historical resistant-bacteria epidemics. There is no known evidence of effectiveness of this product in the treatment of minor burns or surface bacterial infections involving wounds, cutaneous ulcers or the various pyodermas.

CONTRAINDICATIONS: Known prior sensitization is a contraindication to the use of nitrofurazone.

WARNINGS: Nitrofurazone has been shown to produce mammary tumors when fed at high doses to female Sprague-Dawley rats. The relevance of this to topical use in humans is unknown.

USAGE IN PREGNANCY: Safe use of nitrofurazone during pregnancy has not been established. Therefore, the drug is not recommended for the treatment of women of childbearing potential, unless the need for the therapeutic benefit of nitrofurazone is, in the attending physician's judgement, greater than the possible risk.

PRECAUTIONS: Use of topical antimicrobials occasionally allows overgrowth of nonsusceptible organisms including fungi. If this occurs or if irritation sensitization or superinfection develops, treatment with nitrofurazone should be discontinued and appropriate therapy instituted.

ADVERSE REACTIONS: Nitrofurazone has not been significantly toxic in man by topical application. In quantitative studies published in the period 1945 to 1970, 206 instances of clinical skin reaction were reported out of 18,249 patients treated with nitrofurazone topical formulations, an overall incidence of 1.1%. The treatment of nitrofurazone sensitization is not distinctive; general measures commonly used for a variety of sensitization reactions are adequate, except for the rare instance of severe contact dermatitis in which steroid administration may be indicated.

DOSEAGE AND ADMINISTRATION: Burns. Apply directly to the lesion as with a spatula, or first place on sterile gauze. Impregnated gauze may be used. Reapply once daily or once weekly, depending on the preferred dressing technique. Skin Grafts. The dressing is used both to prepare burns and other lesions for grafting, and post-operatively as a prophylactic measure. By rapid irradiation of the infection, it can produce clean, firm granulation tissue. Because it is water soluble and has negligible tissue toxicity, it does not interfere with successful takes. Flushing the gauze with sterile saline facilitates removal.

CAUTION: Federal law prohibits dispensing without prescription.

HOW SUPPLIED: Nitrofurazone Ointment: 8 oz. & 1 lb. jars.

ANIMAL TOXICOLOGY: The oral administration of nitrofurazone for 7 days to rats at extremely high dosage

levels of 240 mg/kg/day produced severe hepato-renal lesions whereas only renal changes were seen when the dosage level was reduced to 60 mg/kg/day for 60 days.

Dosage levels of 60 and 30 mg/kg/day shortened the time of appearance of the typical mammary gland tumor associated with older female rats. These tumors exhibited the same histological characteristics seen in the spontaneously occurring tumors and were seen only in the female animals. No mammary tumors were seen in rats treated with nitrofurazone orally for 1 year at levels of approximately 11 mg/kg/day. Spermatogenic arrest was noted in the male rats at dosage levels of 30 mg/kg/day and above.

Dogs treated orally with nitrofurazone for 400 days at levels of 11 mg/kg/day showed no toxic effects related to drug treatment. The single intravenous administration in dogs of 20, 35, or 75 mg/kg nitrofurazone produced clinical signs of lacrimation, salivation, emesis, diarrhea, excitation, weakness, ataxia and weight loss, whereas 100 mg/kg produced convulsions and death.

There was no evidence of toxicosis in rhesus monkeys treated with doses of nitrofurazone as high as 58 mg/kg/day for 10 weeks and 23 mg/kg/day for 63 weeks. Finally, when 30 mg/kg of nitrofurazone was administered to pregnant rabbits once daily on days 7 through 15 of pregnancy, there was a slight increase in the frequency of stillbirths, but no teratogenic effects were seen.

FOR EXTERNAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
KEEP AWAY FROM EXCESSIVE HEAT AND SUNLIGHT

Manufactured by: WENDT LABORATORIES, INC.
 Minneapolis, Minnesota 55437

12/80

Labeling: ORIGINAL
NDA No: 86 766 Rev'd. 5/19/80
Reviewed by: _____



NITROFURAZONE 0.2% OINTMENT
FOR EXTERNAL USE ONLY
SEE INSERT
KEEP OUT OF REACH OF CHILDREN
CAUTION: Federal law prohibits dispensing without prescription.
Net Contents: 8 oz. (227 g.)
Manufactured By
WENDT LABORATORIES
Minneapolis, Minn. 55437

CONTAINS:
0.2% Nitrofurazone in water soluble ointment-like base of polyethylene glycols.
Do not store above 86°F. (30°C.)
Protect from light.
Read insert carefully for WARNINGS and PRECAUTIONS.
DIRECTIONS: Apply to lesions directly or on gauze. Reapply once daily or as directed.
For use only as adjunctive therapy of patients with second- and third-degree burns when bacterial resistance to other agents is a real or potential problem; or in skin grafting where bacterial contamination may cause graft rejection and/or donor site infection particularly in hospitals with historical resistant bacteria epidemics.
CAUTION: If irritation occurs, discontinue treatment.

APPROVED
LOT NO. 1981
EXP. DATE MAY 1 1981



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