FLU-NIX- flunixin meglumine injection, solution Huvepharma, Inc

Sterile NDC 23243-0120-4

Flu-Nix™ (flunixin meglumine injection) 50 mg/mL

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

Approved by FDA under ANADA # 200-061

NET CONTENTS: 100 mL

Only for Intravenous Use in Beef and Dairy Cattle. Not for Use in Dry Dairy Cows and Veal Calves. For Intravenous and Intramuscular use in Horses.

Before using this drug, read package outsert for complete product information.

To report suspected adverse drug events, for technical assistance or to obtain a copy of the Safety Data Sheet (SDS), contact Huvepharma, Inc. at 1-877-994-4883 or www.huvepharma.us. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or http://www.fda.gov/reportanimalae.



Registered trademark of Huvepharma, Inc.
 Manufactured for
 Huvepharma, Inc.
 Rev. 09-2021
 Peachtree City, GA 30269
 F-2847-04

RESIDUE WARNINGS:

Cattle must not be slaughtered for human consumption within 4 days of the last treatment. Milk that has been taken during treatment and for 36 hours after the last treatment must not be used for food. Not for use in dry dairy cows. A withdrawal period has not been established for this product in preruminating calves. Do not use in calves to be processed for veal. Do not use in horses intended for food. Approved only for intravenous administration in cattle. Intramuscular administration has resulted in violative residues in the edible tissues of cattle sent to slaughter.

Store at Controlled Room Temperature, 20° to 25° C (68° to

77º F) [See USP].

Lot No.: Exp. Date:

Flu-Nix™

(flunixin meglumine injection) 50 mg/mL

Only for Intravenous Use in Beef and Dairy Cattle. Not for Use in Dry Dairy Cows and Veal Calves. For Intravenous and Intramuscular Use in Horses.

Caution

Federal law restricts this drug to use by or on the order of a licensed veterinarian.

Description

Each milliliter of Flu-Nix™ (flunixin meglumine injection) contains flunixin meglumine equivalent to 50 mg flunixin, 0.1 mg edetate disodium, 2.5 mg sodium formaldehyde sulfoxylate, 4.0 mg diethanolamine, 207.2 mg propylene glycol, 5.0 mg phenol as preservative, hydrochloric acid, water for injection q.s.

Pharmacology

Flunixin meglumine is a potent, non-narcotic, non-steroidal, analgesic agent with anti-inflammatory and anti-pyretic activity. It is significantly more potent than pentazocine,

meperidine and codeine as an analgesic in the rat yeast paw test.

Horse: Flunixin is four times as potent on a mg-per-mg basis as phenylbutazone as measured by the reduction in lameness and swelling in the horse. Plasma half-life in horse

serum is 1.6 hours following a single dose of 1.1 mg/kg. Measurable amounts are detectable in

horse plasma at 8 hours post injection.

Cattle: Flunixin meglumine is a weak acid (pKa=5.82)¹ which exhibits a high degree of

plasma protein binding (approximately 99%).² However, free (unbound) drug appears to readily

partition into body tissues (V_{ss} predictions range from 297 to 782 mL/kg. $^{2-5}$ Total body water is

approximately equal to 570 mL/kg).⁶ In cattle, elimination occurs primarily through biliary excretion.⁷ This may, at least in part, explain the presence of multiple peaks in the blood concentration/time profile following IV administration.²

In healthy cattle, total body clearance has been reported to range from 90 to 151 mL/kg/hr.²⁻⁵

These studies also report a large discrepancy between the volume of distribution at a steady

state (V_{ss}) and the volume of distribution associated with the terminal elimination phase (V_{B}). This discrepancy appears to be attributable to extended drug elimination from a deep

compartment.⁸ The terminal half-life has been shown to vary from 3.14 to 8.12 hours.²⁻

Flunixin persists in inflammatory tissues⁹ and is associated with anti-inflammatory properties

which extend well beyond the period associated with detectable plasma drug concentrations.^{4,9}

These observations account for the counterclock-wise hysteresis associated with flunixin's pharmacokinetic/pharmacodynamic relationships. ¹⁰ Therefore, prediction of drug

concentrations based upon the estimated plasma terminal elimination half-life will likely underestimate both the duration of drug action and the concentration of drug remaining at the

site of activity.

Indications

Horse: Flu-Nix[™] (flunixin meglumine injection) is recommended for the alleviation of inflammation and pain associated with musculoskeletal disorders in the horse. It is also recommended for the alleviation of visceral pain associated with colic in the horse.

Cattle: Flu-Nix™ (flunixin meglumine injection) is indicated for the control of pyrexia associated

with bovine respiratory disease, endotoxemia and acute bovine mastitis. Flu-Nix $^{\text{m}}$ (flunixin

meglumine injection) is also indicated for the control of inflammation in endotoxemia.

Dose and Administration

Horse: The recommended dose for musculoskeletal disorders is 0.5 mg per pound (1 mL/100 lbs) of body weight once daily. Treatment may be given by intravenous or intramuscular

injection and repeated for up to 5 days. Studies show onset of activity is within 2 hours. Peak

response occurs between 12 and 16 hours. Peak response occurs between 12 and 16 hours and

duration of activity is 24-36 hours.

The recommended dose for the alleviation of pain associated with equine colic is 0.5 mg per pound

of body weight. Intravenous administration is recommended for prompt relief. Clinical studies

show pain is alleviated in less than 15 minutes in many cases. Treatment may be repeated when

signs of colic recur. During clinical studies approximately 10% of the horses required one or

two additional treatments. The cause of colic should be determined and treated with concomitant therapy.

Cattle: The recommended dose for control of pyrexia associated with bovine respiratory

disease and endotoxemia and control of inflammation in endotoxemia is 1.1 to 2.2 mg/kg

(0.5 to 1 mg/lb;1 to 2 mL per 100 lbs) of body weight given by slow intravenous administration

either once a day as a single dose or divided into two doses administered at 12-hour intervals for

up to 3 days. The total daily dose should not exceed 2.2 mg/kg (1.0 mg/lb) of body

weight.

Avoid rapid intravenous administration of the drug.

The recommended dose for acute bovine mastitis is 2.2 mg/kg (1.0 mg/lb; 2 mL per 100 lbs) of body

weight given once by intravenous administration.

Contraindications

Horse: There are no known contraindications to this drug when used as directed. Intra-arterial

injection should be avoided. Horses inadvertently injected intra-arterially can show adverse

reactions. Signs can be ataxia, incoordination, hyperventilation, hysteria, and muscle weakness.

Signs are transient and disappear without antidotal medication within a few minutes. Do not use in horses showing hypersensitivity to flunixin meglumine.

Cattle: NSAIDS inhibit production of prostaglandins which are important in signaling the initiation of parturition. The use of flunixin can delay parturition and prolong labor which

may increase the risk of stillbirth. Do not use Flu-Nix™ (flunixin meglumine injection) within 48

hours of expected parturition.

Do not use in animals showing hypersensitivity to flunixin meglumine. Use judiciously when renal

impairment or gastric ulceration are suspected

RESIDUE WARNINGS:

Cattle must not be slaughtered for human consumption within 4 days of the last treatment. Milk that has been taken during treatment and for 36 hours after the last treatment must not be used for food. Not for use in dry dairy cows. A withdrawal period has not been established for this product in preruminating calves. Do not use in calves to be processed for veal. Do not use in horses intended for food. Approved only for intravenous administration in cattle. Intramuscular administration has resulted in violative residues in the edible tissues of cattle sent to slaughter.

Precautions

As a class, cyclo-oxygenase inhibitory NSAIDs may be associated with gastrointestinal and renal

toxicity. Sensitivity to drug-associated adverse effects varies with the individual patient. Patients

at greatest risk for renal toxicity are those that are dehydrated, on concomitant diuretic therapy, or

those with renal, cardiovascular, and/or hepatic dysfunction.

Since many NSAIDs possess the potential to induce gastrointestinal ulceration, concomitant

use of Flunixin Meglumine Injection with other anti-inflammatory drugs, such as other NSAIDs

and corticosteroids, should be avoided or closely monitored.

Horse: The effect of Flunixin Meglumine Injection on pregnancy has not been determined.

Studies to determine activity of Flunixin Meglumine Injection when administered concomitantly with other drugs have not been conducted. Drug compatibility should be

monitored

closely in patients requiring adjunctive therapy.

Cattle: Do not use in bulls intended for breeding, as reproductive effects of Flunixin Meglumine Injection in these classes of cattle have not been investigated. NSAIDs are known to

have potential effects on both parturition (See Contraindications) and the estrous cycle. There

may be a delay in the onset of estrus if flunixin is administered during the prostaglandin phase of

the estrous cycle. NSAIDS are known to have the potential to delay parturition through a tocolytic

effect. The use of NSAIDs in the immediate post-partum period may interfere with uterine

involution and expulsion of fetal membranes. Cows should be monitored carefully for placental

retention and metritis if Flunixin Meglumine Injection is used within 24 hours after parturition.

Safety

Horse: A 3-fold intramuscular dose of 1.5 mg/lb of body weight daily for 10 consecutive days was

safe. No changes were observed in hematology, serum chemistry, or urinalysis values. Intravenous

dosages of 0.5 mg/lb daily for 15 days; 1.5 mg/lb daily for 10 days; and 2.5 mg/lb daily for 5 days

produced no changes in blood or urine parameters. No injection site irritation was observed following intramuscular injection of the 0.5 mg/lb recommended dose. Some irritation

was observed following a 3-fold dose administered intramuscularly.

Cattle: No flunixin-related changes (adverse reactions) were noted in cattle administered a 1X

(2.2 mg/kg; 1.0 mg/lb) dose for 9 days (three times the maximum clinical duration). Minimal

toxicity manifested itself at moderately elevated doses (3X and 5X) when flunixin was administered

daily for 9 days, with occasional findings of blood in the feces and/or urine. Discontinue use if hematuria

or fecal blood are observed.

Adverse Reactions

In horses, isolated reports of local reactions following intramuscular injection, particularly in

the neck, have been received. These include localized swelling, sweating, induration, and stiffness. In rare instances in horses, fatal or nonfatal clostridial infections or other infections

have been reported in association with intramuscular use of Flunixin Meglumine Injection. In horses and cattle, rare instances of anaphylactic-like reactions, some of which have

been fatal, have been reported, primarily following intravenous use.

To report suspected adverse drug events, for technical assistance or to obtain a copy of the

Safety Data Sheet (SDS), contact Huvepharma, Inc. at 1-877-994-4883 or www.huvepharma.us.

For additional information about adverse drug experience reporting for animal drugs,

FDA at 1-888-FDA-VETS or http://www.fda.gov/reportanimalae.

How Supplied

Flu-Nix™ (flunixin meglumine injection). 50 mg/mL, is available in 100 mL and 250 mL multi-dose vials.

Store at Controlled Room Temperature, 20º to 25º C (68º to 77º F) [See USP].

When used as labeled, there is no limit on the number of punctures throughout the full expiry period.

REFERENCES

- 1. Johansson M, Anler EL. Gas chromatographic analysis of flunixin in equine urine after extractive methylation. J Chromatogr. 1988:427:55-66.
- 2. Oldensvik K, Johansson M. High-performance liquid chromatography method for determination of flunixin in bovine plasma and pharmacokinetics after single and repeated doses of the drug. Am | Vet Res. 1995:56:489-495.
- 3. Anderson KL, Neff-Davis CA, Davis LE, Bass VD. Pharmacokinetics of flunixin meglumine in lactating cattle after single and multiple intramuscular and intravenous administrations. Am | Vet Res. 1990;51:1464-1467.
- 4. Oldensvik K. Pharmacokinetics of flunixin and its effect on prostaglandin F2a metabolite concentrations after oral and intravenous administration in heifers. I Vet Pharmacol Ther. 1995;18:254-259.
- 5. Hardee GE, Smith IA, Harris SI. Pharmacokinetics of flunixin meglumine in the cow. Res Vet Sci. 1985;39:110-112.
- 6. Ruckebusch Y, Phaneuf LP, Dunlop R. Physiology of Small and Large Animals. Chapter 2; "Body Fluid Compartments," Philadelphia, Pa. B.C. Decker: 1991:8-18.
- 7. Kopcha M, Ahi AS. Experimental use of flunixin meglumine and phenylbutazone in food-producing animals. I Am Vet Med Assoc. 1989;194:45-49.
- 8. Wagner JG. Significance of ratios of different volumes of distribution in pharmacokinetics.

Biopharm & Drug Dispos. 1983;4:263-270. 9. Lees P, Higgins AJ. Flunixin inhibits prostaglandin E2 production in equine inflammation. Res Vet Sci. 1984;37:347-349. 10. Landoni MF, Cunningham FM, Lees P. Determination of pharmacokinetics and pharmacodynamics of flunixin in calves by use of pharmacokinetic/ pharmacodynamic modeling. Am J Vet Res. 1995;56:786-794.

Only for Intravenous use in Beef and Dairy Cattle. Not for Use in Dry Dairy Cows and Veal Calves. For Intravenous and Intramuscular Use in Horses. Read accompanying directions for use.



Approved by FDA under ANADA # 200-061
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Manufactured for
Huvepharma, Inc.
Peachtree City, GA 30269
Rev. 05-2022 F-2847-05

Sterile NDC 23243-0120-5

Flu-Nix™ (flunixin meglumine injection) 50 mg/mL

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

Approved by FDA under ANADA # 200-061

NET CONTENTS: 250 mL

Only for Intravenous Use in Beef and Dairy Cattle. Not for Use in Dry Dairy Cows and Veal Calves. For Intravenous and Intramuscular use in Horses.

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Rev. 09-2021 F-2847-05

RESIDUE WARNINGS:

Cattle must not be slaughtered for human consumption within 4 days of the last treatment. Milk that has been taken during treatment and for 36 hours after the last treatment must not be used for food. Not for use in dry dairy cows. A withdrawal period has not been established for this product in preruminating calves. Do not use in calves to be processed for veal. Do not use in horses intended for food. Approved only for intravenous administration in cattle. Intramuscular administration has resulted in violative residues in the edible tissues of cattle sent to slaughter.

Store at Controlled Room Temperature, 20° to 25° C (68° to 77° F) [See USP].

Lot No.: Exp. Date:

Flu-Nix™ (flunixin meglumine injection) 50 mg/mL Multiple-Dose Vial

Only for Intravenous Use in Beef and Dairy Cattle. Not for Use in Dry Dairy Cows and Veal Calves. For Intravenous and Intramuscular Use in Horses.

Caution

Federal law restricts this drug to use by or on the order of a licensed veterinarian.

Description

Each milliliter of Flu-Nix™ (flunixin meglumine injection) contains flunixin meglumine equivalent to 50 mg flunixin, 0.1 mg edetate disodium, 2.5 mg sodium formaldehyde sulfoxylate, 4.0 mg diethanolamine, 207.2 mg propylene glycol, 5.0 mg phenol as preservative, hydrochloric acid, water for injection q.s.

Pharmacology

Flunixin meglumine is a potent, non-narcotic, non-steroidal, analgesic agent with anti-inflammatory and anti-pyretic activity. It is significantly more potent than pentazocine,

meperidine and codeine as an analgesic in the rat yeast paw test.

Horse: Flunixin is four times as potent on a mg-per-mg basis as phenylbutazone as

measured by the reduction in lameness and swelling in the horse. Plasma half-life in horse

serum is 1.6 hours following a single dose of 1.1 mg/kg. Measurable amounts are detectable in

horse plasma at 8 hours post injection.

 $\it Cattle:$ Flunixin meglumine is a weak acid (pKa=5.82) 1 which exhibits a high degree of

plasma protein binding (approximately 99%).² However, free (unbound) drug appears to readily

partition into body tissues (V_{ss} predictions range from 297 to 782 mL/kg. $^{2-5}$ Total body water is

approximately equal to 570 mL/kg).⁶ In cattle, elimination occurs primarily through biliary excretion.⁷ This may, at least in part, explain the presence of multiple peaks in the blood concentration/time profile following IV administration.²

In healthy cattle, total body clearance has been reported to range from 90 to 151 mL/kg/hr.²⁻⁵

These studies also report a large discrepancy between the volume of distribution at a steady

state (V_{SS}) and the volume of distribution associated with the terminal elimination phase ($V_{\tilde{B}}$). This discrepancy appears to be attributable to extended drug elimination from a deep

compartment.⁸ The terminal half-life has been shown to vary from 3.14 to 8.12 hours.²⁻

Flunixin persists in inflammatory tissues 9 and is associated with anti-inflammatory properties

which extend well beyond the period associated with detectable plasma drug concentrations.^{4,9}

These observations account for the counterclock-wise hysteresis associated with flunixin's pharmacokinetic/pharmacodynamic relationships. ¹⁰ Therefore, prediction of drug

concentrations based upon the estimated plasma terminal elimination half-life will likely underestimate both the duration of drug action and the concentration of drug remaining at the

site of activity.

Indications

Horse: Flu-Nix[™] (flunixin meglumine injection) is recommended for the alleviation of inflammation and pain associated with musculoskeletal disorders in the horse. It is also recommended for the alleviation of visceral pain associated with colic in the horse.

Cattle: Flu-Nix™ (flunixin meglumine injection) is indicated for the control of pyrexia associated

with bovine respiratory disease, endotoxemia and acute bovine mastitis. Flu-Nix™ (flunixin

meglumine injection) is also indicated for the control of inflammation in endotoxemia.

Dose and Administration

Horse: The recommended dose for musculoskeletal disorders is 0.5 mg per pound (1 mL/100 lbs) of body weight once daily. Treatment may be given by intravenous or intramuscular

injection and repeated for up to 5 days. Studies show onset of activity is within 2 hours. Peak

response occurs between 12 and 16 hours. Peak response occurs between 12 and 16 hours and

duration of activity is 24-36 hours.

The recommended dose for the alleviation of pain associated with equine colic is 0.5 mg per pound

of body weight. Intravenous administration is recommended for prompt relief. Clinical studies

show pain is alleviated in less than 15 minutes in many cases. Treatment may be repeated when

signs of colic recur. During clinical studies approximately 10% of the horses required one or

two additional treatments. The cause of colic should be determined and treated with concomitant therapy.

Cattle: The recommended dose for control of pyrexia associated with bovine respiratory

disease and endotoxemia and control of inflammation in endotoxemia is 1.1 to 2.2 mg/kg

(0.5 to 1 mg/lb;1 to 2 mL per 100 lbs) of body weight given by slow intravenous administration

either once a day as a single dose or divided into two doses administered at 12-hour intervals for

up to 3 days. The total daily dose should not exceed 2.2 mg/kg (1.0 mg/lb) of body weight.

Avoid rapid intravenous administration of the drug.

The recommended dose for acute bovine mastitis is 2.2 mg/kg (1.0 mg/lb; 2 mL per 100 lbs) of body

weight given once by intravenous administration.

Contraindications

Horse: There are no known contraindications to this drug when used as directed. Intra-arterial

injection should be avoided. Horses inadvertently injected intra-arterially can show adverse

reactions. Signs can be ataxia, incoordination, hyperventilation, hysteria, and muscle weakness.

Signs are transient and disappear without antidotal medication within a few minutes. Do not use in horses showing hypersensitivity to flunix in meglumine.

Cattle: NSAIDS inhibit production of prostaglandins which are important in signaling the initiation of parturition. The use of flunixin can delay parturition and prolong labor which

may increase the risk of stillbirth. Do not use Flu-Nix™ (flunixin meglumine injection) within 48

hours of expected parturition.

Do not use in animals showing hypersensitivity to flunixin meglumine. Use judiciously when renal

impairment or gastric ulceration are suspected

RESIDUE WARNINGS:

Cattle must not be slaughtered for human consumption within 4 days of the last treatment. Milk that has been taken during treatment and for 36 hours after the last treatment must not be used for food. Not for use in dry dairy cows. A withdrawal period

has not been established for this product in preruminating calves. Do not use in calves to be processed for veal. Do not use in horses intended for food. Approved only for intravenous administration in cattle. Intramuscular administration has resulted in violative residues in the edible tissues of cattle sent to slaughter.

Precautions

As a class, cyclo-oxygenase inhibitory NSAIDs may be associated with gastrointestinal and renal

toxicity. Sensitivity to drug-associated adverse effects varies with the individual patient. Patients

at greatest risk for renal toxicity are those that are dehydrated, on concomitant diuretic therapy, or

those with renal, cardiovascular, and/or hepatic dysfunction.

Since many NSAIDs possess the potential to induce gastrointestinal ulceration, concomitant

use of Flunixin Meglumine Injection with other anti-inflammatory drugs, such as other NSAIDs

and corticosteroids, should be avoided or closely monitored.

Horse: The effect of Flunixin Meglumine Injection on pregnancy has not been determined.

Studies to determine activity of Flunixin Meglumine Injection when administered concomitantly with other drugs have not been conducted. Drug compatibility should be monitored

closely in patients requiring adjunctive therapy.

Cattle: Do not use in bulls intended for breeding, as reproductive effects of Flunixin Meglumine Injection in these classes of cattle have not been investigated. NSAIDs are known to

have potential effects on both parturition (See Contraindications) and the estrous cycle. There

may be a delay in the onset of estrus if flunixin is administered during the prostaglandin phase of

the estrous cycle. NSAIDS are known to have the potential to delay parturition through a tocolytic

effect. The use of NSAIDs in the immediate post-partum period may interfere with uterine

involution and expulsion of fetal membranes. Cows should be monitored carefully for placental

retention and metritis if Flunixin Meglumine Injection is used within 24 hours after parturition.

Safety

Horse: A 3-fold intramuscular dose of 1.5 mg/lb of body weight daily for 10 consecutive days was

safe. No changes were observed in hematology, serum chemistry, or urinalysis values. Intravenous

dosages of 0.5 mg/lb daily for 15 days; 1.5 mg/lb daily for 10 days; and 2.5 mg/lb daily for 5 days

produced no changes in blood or urine parameters. No injection site irritation was observed following intramuscular injection of the 0.5 mg/lb recommended dose. Some irritation

was observed following a 3-fold dose administered intramuscularly.

Cattle: No flunixin-related changes (adverse reactions) were noted in cattle administered a 1X

(2.2 mg/kg; 1.0 mg/lb) dose for 9 days (three times the maximum clinical duration). Minimal

toxicity manifested itself at moderately elevated doses (3X and 5X) when flunixin was administered

daily for 9 days, with occasional findings of blood in the feces and/or urine. Discontinue use if hematuria

or fecal blood are observed.

Adverse Reactions

In horses, isolated reports of local reactions following intramuscular injection, particularly in

the neck, have been received. These include localized swelling, sweating, induration, and stiffness. In rare instances in horses, fatal or nonfatal clostridial infections or other infections

have been reported in association with intramuscular use of Flunixin Meglumine Injection. In horses and cattle, rare instances of anaphylactic-like reactions, some of which have

been fatal, have been reported, primarily following intravenous use.

To report suspected adverse drug events, for technical assistance or to obtain a copy of the

Safety Data Sheet (SDS), contact Huvepharma, Inc. at 1-877-994-4883 or www.huvepharma.us.

For additional information about adverse drug experience reporting for animal drugs, contact

FDA at 1-888-FDA-VETS or http://www.fda.gov/reportanimalae.

How Supplied

Flu-Nix[™] (flunixin meglumine injection), 50 mg/mL, is available in 100 mL and 250 mL multi-dose vials.

Store at Controlled Room Temperature, 20° to 25° C (68° to 77° F) [See USP].

When used as labeled, there is no limit on the number of punctures throughout the full expiry period.

REFERENCES

- 1. Johansson M, Anler EL. Gas chromatographic analysis of flunixin in equine urine after extractive methylation. J Chromatogr. 1988;427:55-66.
- 2. Oldensvik K, Johansson M. High-performance liquid chromatography method for determination of flunixin in bovine plasma and pharmacokinetics after single and repeated doses of the drug. Am J Vet Res. 1995:56:489-495.
- 3. Anderson KL, Neff-Davis CA, Davis LE, Bass VD. Pharmacokinetics of flunixin meglumine in

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- 4. Oldensvik K. Pharmacokinetics of flunixin and its effect on prostaglandin F2a metabolite concentrations after oral and intravenous administration in heifers. J Vet Pharmacol Ther. 1995;18:254-259.
- 5. Hardee GE, Smith JA, Harris SJ. Pharmacokinetics of flunixin meglumine in the cow. Res Vet Sci. 1985;39:110-112.
- 6. Ruckebusch Y, Phaneuf LP, Dunlop R. Physiology of Small and Large Animals. Chapter 2; "Body Fluid Compartments," Philadelphia, Pa: B.C. Decker; 1991:8-18.
- 7. Kopcha M, Ahi AS. Experimental use of flunixin meglumine and phenylbutazone in food-producing animals. J Am Vet Med Assoc. 1989;194:45-49.
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- 9. Lees P, Higgins AJ. Flunixin inhibits prostaglandin E2 production in equine inflammation. Res Vet Sci. 1984;37:347-349.
- 10. Landoni MF, Cunningham FM, Lees P. Determination of pharmacokinetics and pharmacodynamics of flunixin incalves by use of pharmacokinetic/ pharmacodynamic modeling. Am J Vet Res. 1995;56:786-794.

Only for Intravenous use in Beef and Dairy Cattle. Not for Use in Dry Dairy Cows and Veal Calves. For Intravenous and Intramuscular Use in Horses. Read accompanying directions for use.



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Manufactured for Huvepharma, Inc. Peachtree City, GA 30269

Rev. 05-2022

F-2847-06

RESIDUE WARNINGS:
Cattle must not be slaughtered for human consumption within 4 days of
the last treatment. Milk that has been taken during treatment and for 36
hours after the last treatment must not be used for food. Not for use in
dry diving rows. A winthdrawlay period has not been established for this
product in preturminating calves, to not use in calves to be processed for
void. To not use in horses intended for food, approved only for intravenous
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Sterile NDC 23243-0120-4

(flunixin meglumine injection)
50 mg/ml

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.
Approved by FDA under ANADA # 200-061

NET CONTENTS: 100 mL

HUVEPHARMA

Only for intravenous Use in Beef and Dairy Cattle.

Not for Use in Dry Dairy Cows and Veal Calves. For Intravenous and Intramuscular use in Horses.

Before using this drug, read package outsert for complete product information.

product information. To report suspected adverse drug events, for technical assistance or to obtain a only of the Safety Data Sheet (SDS), contact Huvenhams, Inc. at. 1 3779-94-483 or www.huvepharma.us. For additional information about adverse drug experience reporting for arminal drugs, contact FDA at 1 1-388-04-WESS or http://www.fds.gov/preportaninalae.

TAKE TIME OBSERVE LABEL DIRECTIONS Registered trademark of Huvepharma, Inc.

Manufactured for Huvepharma, Inc. Peachtree City, GA 30269

Rev. 09-2021 F-2847-04

RESIDUE WARNINGS:
Cattle must not be slaughtered for human consumption within 4 days of the last treatment. Affile that has been taken dust treatment. Affile that has been taken dust treatment must not be used for food. Not for use in dry dairy cows. A withdrawal period has not been established for this product in day not been established for this product in be processed for veal. Do not use in horse of the processed for veal. Do not use in horse intended for food. Approved only for intravenous administration in cattle. Woldstive residues in the edible tissues of cattle sent to slaughter.

Store at Controlled Room Temperature, 20° to 25° C (68° to 77° F) [See USP].





Sterile NDC 23243-0120-5

Flu-Nix™ (flunixin meglumine injection) 50 mg/mL

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian. Approved by FDA under ANADA # 200-061

NET CONTENTS: 250 mL



HUVEPHARMA

Only for Intravenous Use in Beef and Dairy Cattle. Not for Use in Dry Dairy Cows and Veal Calves. For Intravenous and Intramuscular use in Horses.

Before using this drug, read package outsert for complete product information.

complete product Information.

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TAKE TIME OBSERVE LABEL DIRECTIONS

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Manufactured for Huvepharma, Inc. Peachtree City, GA 30269

Rev. 09-2021 F-2847-05

FLU-NIX

flunixin meglumine injection, solution

Product Information					
Product Type	PRESCRIPTION ANIMAL DRUG	Item Code (Source)	NDC:23243-0120		
Route of Administration	INTRAVENOUS, INTRAMUSCULAR				

Active Ingredient/Active Moiety				
Ingredient Name	Basis of Strength	Strength		
FLUNIXIN MEGLUMINE (UNII: 8Y3JK0JW3U) (FLUNIXIN - UNII:356IB1O400)	FLUNIXIN	50 mg in 1 mL		
phenol (UNII: 339NCG44TV) (PHENOL - UNII:339NCG44TV)	phenol	5 mg in 1 mL		

P	Packaging						
#	Item Code	Package Description	Marketing Start Date	Marketing End Date			
1	NDC:23243-0120-4	100 mL in 1 VIAL, MULTI-DOSE					
2	NDC:23243-0120-5	200 mL in 1 VIAL, MULTI-DOSE					

Marketing Information					
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date		
ANADA	ANADA200061	02/10/2015			

Labeler - Huvepharma, Inc (619153559)

Registrant - Huvepharma EOOD (552691651)

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