

Furosemide

(fur-oh-se-mide)

Category: Diuretic

Other Names for this Medication: Frusemide, Lasix®, Salix®, Disal®

Common Dosage Forms: Veterinary: 12.5 mg & 50 mg tablets; 10 mg/mL oral syrup; 50 mg/mL injectable solution. **Human:** 20 mg, 40 mg, & 80 mg tablets; 40 mg/5 mL (8 mg/mL) oral liquid; 10mg/mL injection.

This information sheet does not contain all available information for this medication. It is to help answer commonly asked questions and help you give the medication safely and effectively to your animal. If you have other questions or need more information about this medication, contact your veterinarian or pharmacist.

Key Information

- ▶ While taking this drug, your animal will urinate more often than usual. Be sure that your animal always has access to plenty of fresh water.
- ▶ May be given with or without food. If your pet vomits or acts sick after receiving the drug on an empty stomach, try giving the next dose with food or a small treat. If vomiting continues, contact your veterinarian.
- ▶ Because this drug can change electrolyte (salt) levels in the blood, your veterinarian will need to monitor your pet with blood tests to make sure there are no problems related to this effect.
- ▶ Contact your veterinarian immediately if weakness, collapse, head tilt, lack of urination, or a fast heartbeat is noticed.

How is this medication useful?

Furosemide is a diuretic that works in the kidneys to remove excess water from the body in conditions associated with heart failure, lung disease (eg, pulmonary edema), end-stage liver disease, and excessive fluid buildup in tissues. Furosemide may also be used in racehorses that get nosebleeds when they race.

There are furosemide products that have been approved by the FDA (U.S. Food & Drug Administration) for use in dogs, cats, and horses. The FDA allows veterinarians to prescribe and use human products containing this drug in animals in certain situations. You and your veterinarian can discuss why this drug is the most appropriate choice.

What should I tell my veterinarian to see if this medication can be safely given?

Many things might affect how well this drug will work in your animal. Be sure to discuss the following with your veterinarian so together you can make the best treatment decisions.

- ▶ Other drugs can interact with furosemide, so be sure to tell your veterinarian and pharmacist what medications (including vitamins, supplements, or herbal therapies) you are giving your animal, as well as the amount and schedule of each.
- ▶ Tell your veterinarian about any conditions or diseases your animal may have now or has had in the past.
- ▶ If your animal has been treated for the same disease or condition in the past, tell your veterinarian about the treatment and how well it did or didn't work.
- ▶ Furosemide is relatively safe to use in pregnant animals, but if your animal is pregnant or nursing, talk to your veterinarian about the risks of using this drug.
- ▶ Tell your veterinarian and pharmacist about any medication side

effects (including allergic reactions, lack of appetite, diarrhea, itching, hair loss) your animal has developed in the past.

When should this medication not be used or be used very carefully?

No drug is 100% safe in all patients, but your veterinarian will discuss with you any specific concerns about using this drug in your animal.

This drug **SHOULD NOT** be used in patients:

- ▶ That had an allergic reaction to it or other drugs in the same class (eg, torsemide, bumetanide) in the past.

This drug should be used **WITH CAUTION** in patients:

- ▶ With kidney problems.
- ▶ With severe liver disease.
- ▶ With diabetes or other conditions where body water, blood sugar, or blood electrolytes (salts) are out of balance.
- ▶ Allergic to sulfa drugs. Furosemide is related to this class of drugs and could cause an allergic reaction. Discuss with your veterinarian whether this drug is best for your animal.
- ▶ At risk of dehydration, such as with vomiting, diarrhea, or heavy exercise.

If your animal matches any of these, talk to your veterinarian about the possible risks of using the drug versus the benefits it may have.

What are the side effects of this medication?

Common, but not serious side effects include:

- ▶ Increased need to urinate. Be sure to allow your animal the chance to urinate more often, especially when starting this drug or when dosages are increased.
- ▶ Because furosemide can cause an imbalance in water and electrolytes (salts) in the body or affect kidney function, your veterinarian will likely want to do blood tests to check for these effects.
- ▶ Changes in bowel habits (diarrhea or constipation).

You don't have to be overly concerned if you see any of these unless they are severe, worsen, or continue to be a problem. Contact your veterinarian if this happens.

Side effects that may be serious or indicate a serious problem:

- ▶ High dosages (usually given with an IV) can cause hearing or balance problems. If you notice that your pet seems to have lost its balance or has a slight tilt to its head.
- ▶ Weakness or collapse (passing out).
- ▶ Lack of urination.
- ▶ Rapid heartbeat.
- ▶ Very rarely, furosemide can cause anemia or other problems with blood.

If you see any of these, contact your veterinarian immediately.

If my animal somehow gets too much of this medication (an overdose) what should I do?

Overdoses of furosemide can be serious as they can lead to dehydration, reduced blood pressure, and electrolyte (salt) imbalances. Central nervous system effects such as coma or seizures (convulsions) are possible. High dosages may cause ear/hearing toxicity. If you witness or suspect an overdose of furosemide in your animal, contact your veterinarian or an animal poison control center for further advice. Animal poison control centers that are open 24 hours a day include: **ASPCA Animal Poison Control Center** (888-426-4435) and **Pet Poison HELPLINE** (855-764-7661); a consultation fee is charged for these services.

How should this medication be given?

For this medication to work, give it exactly as your veterinarian has prescribed. It's a good idea to always check the prescription label to be sure you are giving the drug correctly.

- ▶ Unless your veterinarian tells you differently, make sure that your animal has plenty of fresh, clean drinking water available while on furosemide therapy.
- ▶ May be given with or without food. If your pet vomits or acts sick after receiving the drug on an empty stomach, try giving the next dose with food or a small treat. If vomiting continues, contact your veterinarian.
- ▶ Your animal will urinate more often than normal. If you are giving this medication more than once per day, try to avoid giving the last dose of the day within a few hours of bedtime to reduce the necessity of having to get up and let your animal out to urinate. Your veterinarian can suggest the best times to give this drug to help avoid this problem. Do not withhold water at any time.
- ▶ Liquid forms of this medication must be measured carefully. Your veterinarian or pharmacist can help by providing special measuring spoons or syringes.
- ▶ If you have difficulty getting your animal to take the medicine, contact your veterinarian or pharmacist for tips to help dosing and reducing the stress of medication time.
- ▶ This medication can be given for various lengths of time. Be sure you understand how long your veterinarian wants you to continue giving this medication. Prescription refills may be necessary before the therapy will be complete. Before stopping this medication, talk to your veterinarian, as there may be important reasons to continue its use.

What should I do if I miss giving a dose of this medication?

If you miss a dose, give it when you remember, but if it is close to the time for the next dose, skip the dose you missed and give it at the next scheduled time. After that, return to the regular dosing schedule. Do not double-up or give extra doses.

How should I store this medication?

- ▶ Furosemide tablets and oral liquid should be stored in the original prescription bottle or an approved dosage reminder container (ie, pill minder) that is child- and light-resistant, at room temperature. Do not allow the liquid to freeze.
- ▶ Keep away from children and other animals.
- ▶ If your veterinarian or pharmacist has made (compounded) a special formulation for your animal, follow the noted storage recommendations and expiration date for the product.

Can handling this medication be hazardous to me, my family, or other pets?

There are no specific precautions required when handling this medication unless you are allergic to it. Wash your hands after handling any medication. People who are severely allergic to sulfa medications should wear disposable gloves when handling furosemide tablets.

How should I dispose of this medication if I don't use it all?

- ▶ Do not flush this medication down the toilet or wash it down the sink. If a community drug "take-back" program is available, use this option. If there is no take-back program, mix the drug with coffee grounds or cat litter (to make it undesirable to children and animals and unrecognizable to people who might go through your trash), place the mixture in a sealable plastic bag to keep it from leaking out, and throw the bag out with the regular trash.
- ▶ Do not save left over medication for future use or give it to others to use.

What other information is important for this medication?

- ▶ Use of this drug may not be allowed in certain animal competitions. Check rules and regulations before entering your animal in a competition while this medication is being administered.
- ▶ While your animal is taking this medication, it is important to return to your veterinarian for follow up visits to ensure your animal is tolerating the medication well and having a positive response to the therapy.
- ▶ The use of furosemide in performance horses is regulated state by state. Check with your state authorities prior to using furosemide in a performance or competition.

If you have any other questions or concerns about this medication, contact your veterinarian or pharmacist.