

Hydrochlorothiazide

(*hye-droe-klor-oh-thye-a-zide*)

Category: Diuretic

Other Names for this Medication: HydroDIURIL®

Common Dosage Forms: Veterinary: None. **Human:** 25 mg & 50 mg tablets; 12.5 mg capsules. Hydrochlorothiazide is found in combination products with several other drugs including spironolactone (Aldactazide®), enalapril, and others.

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

- ▶ When beginning this medicine, your animal may urinate more often than normal.
- ▶ May be given with or without food. Allow access to fresh, clean water at all times; encourage normal food intake. 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 salt (electrolyte) levels in the blood, your veterinarian will want to do more frequent bloodwork checks while your animal is receiving this drug. Do not miss these important follow-up visits.
- ▶ Contact your veterinarian immediately if excessive thirst, weakness, collapse (passing out), head tilt, lack of urination, or a racing heartbeat is noticed.

How is this medication useful?

Hydrochlorothiazide is a diuretic that works in the kidneys to remove excess fluid (water) and salt from the body. It is used in small animals to treat high blood pressure, heart failure, calcium-containing kidney or bladder stones, and a rare condition called nephrogenic diabetes insipidus (not diabetes mellitus or sugar diabetes). In horses, hydrochlorothiazide may be used to treat a condition called hyperkalemic periodic paralysis (HyPP) as it can help reduce the amount of potassium in the blood.

The FDA (U.S. Food & Drug Administration) has approved this drug for use in humans but it is not officially approved for use in animals. 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 cause problems when taken with hydrochlorothiazide, 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 or 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.
- ▶ Hydrochlorothiazide is relatively safe to use in pregnant animals, but it is generally recommended not to use it in nursing mothers as it can reduce milk production. 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 cannot produce urine.
- ▶ That have had an allergic or severe reaction to it or other drugs in the same class, (eg, chlorothiazide) in the past.

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

- ▶ With severe kidney or liver disease.
- ▶ With diabetes mellitus or other conditions where body water, blood sugar, or blood salts (electrolytes) are out of balance.
- ▶ That are allergic to sulfa drugs; hydrochlorothiazide is related to sulfas and could cause an allergic reaction. Discuss with your veterinarian whether this drug is best for your animal.
- ▶ That are vomiting or have diarrhea.

If your animal matches any of these conditions, 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. The greater need to urinate may cause some animals to act restless. Be sure to allow your animal the chance to urinate more often, especially when starting this drug or when doses are increased.
- ▶ Vomiting or diarrhea is possible.

You don't have to be overly concerned if you see any of these signs 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:

- ▶ Excessive thirst, weakness, collapse (passing out), lack of urination, or a racing heartbeat.

- ▶ Pale gums. Rarely, hydrochlorothiazide causes anemia or other problems with blood.

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

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

Overdoses of hydrochlorothiazide can be serious as they can lead to dehydration, low blood pressure, salt (electrolyte) imbalances, coma, and seizures. If you witness or suspect an overdose of hydrochlorothiazide 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 food and fresh, clean drinking water available while on hydrochlorothiazide 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. When beginning this medication, your animal may 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 need to get up to allow your animal to urinate. Your veterinarian can suggest the best times to give this drug to avoid this problem.
- ▶ Compounded 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?

- ▶ Hydrochlorothiazide tablets or capsules 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. Protect the oral suspension from freezing. 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 hydrochlorothiazide 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 leftover 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.
- ▶ The use of chlorothiazide in performance horses is regulated state by state. Check with your state authorities prior to using chlorothiazide in a performance or competition.
- ▶ Your veterinarian will need to monitor your animal with examinations and bloodwork checks. Do not miss these important follow-up visits.

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

Spiro lactone with Hydrochlorothiazide (HCTZ)

(speer-on-oh-lak-tone with hye-droe-klor-oh-thye-uh-zide)

Category: Combination Diuretic

Other Names for this Medication: Aldactazide®, spironolactone/HCTZ

Common Dosage Forms: Veterinary: None. **Human:** 25 mg/25 mg, 50 mg/50 mg tablets. Spiro lactone/HCTZ can also be made (compounded) into an oral liquid.



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

- ▶ Spiro lactone with hydrochlorothiazide (HCTZ) may be given with or without food. If your animal vomits or acts sick after receiving this medication on an empty stomach, try giving the next dose with food or a small treat. If vomiting continues, contact your veterinarian.
- ▶ This drug is commonly used in combination with other medications to treat heart failure; it may also be used to relieve signs associated with liver disease.
- ▶ Your animal must always have access to fresh, clean water while on this medication, as spiro lactone will cause your animal to drink and urinate more.
- ▶ Because this drug can change electrolytes (salts) in the blood, regular blood testing will be necessary to keep your animal safe.
- ▶ Contact your veterinarian immediately if your animal develops skin sores, facial itching (cats), persistent or severe lack of appetite, vomiting, or diarrhea, or if your animal has low energy, increased breathing rate or effort, trouble walking or balancing, or stops drinking or urinating.
- ▶ People with sulfa allergies should wear disposable gloves when handling spiro lactone with HCTZ tablets.

How is this medication useful?

The combination of spiro lactone with hydrochlorothiazide (HCTZ) is a diuretic that works in the kidneys to remove excess fluid and salt from the body. This medication is used in combination with other drugs to relieve extra pressure on the heart and lower blood pressure in dogs and cats; this drug combination may also have some protective effects on the heart muscle. Spiro lactone with HCTZ has also been used in dogs to treat fluid buildup in the abdomen that can occur with end-stage liver failure.

The FDA (U.S. Food & Drug Administration) has approved this drug combination for use in humans, but it is not officially approved for use in animals. The FDA allows veterinarians to prescribe products containing this drug in different species or for other conditions 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 spiro lactone and HCTZ, 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 or 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.
- ▶ Spiro lactone and HCTZ use should be avoided in pregnant or nursing animals whenever possible, as spiro lactone may cause birth defects and HCTZ can reduce milk production. 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 cannot produce urine or have severe kidney disease.
- ▶ That have had an allergic reaction to either spiro lactone, HCTZ, or HCTZ-related drugs, (eg, chlorothiazide).
- ▶ That have elevated potassium levels.

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

- ▶ That are pregnant or nursing.
- ▶ With reduced kidney function.
- ▶ With uncontrolled diabetes mellitus or other conditions where body water, blood sugar, or blood electrolytes (salts) are out of balance.
- ▶ That are allergic to sulfa drugs; HCTZ is related to sulfas and may cause an allergic reaction.
- ▶ That are vomiting or have diarrhea.

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:

- ▶ Excessive thirst and greater need to urinate.
- ▶ Low energy. This temporary effect should improve with time.
- ▶ Water and electrolyte imbalances.
- ▶ Spiro lactone can cause enlarged breasts in men; it is not known if this occurs in animals, but if the animal's nipples or breasts enlarge, contact your veterinarian.
- ▶ Vomiting and/or diarrhea.

You don't have to be overly concerned if you see any of these effects 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:

- ▶ Cats: Severe, itchy sores on face. Seen most often in Maine coon cats.
- ▶ Excessive thirst with no urination.
- ▶ Excessive weakness or collapse; unable to get up.
- ▶ Loss of appetite.
- ▶ Fast heartbeat.
- ▶ Pale gums.

Contact your veterinarian immediately if you notice any of these effects.

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

Overdoses of spironolactone with HCTZ can be serious. If you witness or suspect an overdose 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: **Pet Poison HELPLINE** (855-764-7661) and **ASPCA Animal Poison Control Center** (888-426-4435); 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 always has plenty of fresh, clean water available while getting this drug.
- ▶ May be given with or without food. If your animal 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.
- ▶ Since this medication may cause your animal to urinate more often than normal, try to avoid giving the last dose of the day within a few hours of bedtime to reduce the need to get up during the night to let your animal out to urinate. Your veterinarian can suggest the best times to give this drug to your animal to help avoid this problem. **NEVER** withhold water to avoid your animal's need to urinate more frequently.
- ▶ Compounded 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 this medication, 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?

- ▶ Store this medication in the tightly closed, child- and light resistant prescription bottle or an approved dosage reminder container (ie, pill minder) at room temperature.
- ▶ 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. These compounded formulations are usually stored in the refrigerator and must be protected from light or freezing.
- ▶ Keep away from children and other animals.

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. **People who are allergic to sulfa medications should wear disposable gloves when handling spironolactone with HCTZ tablets.** Wash your hands after handling any medication.

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?

- ▶ The use of spironolactone with HCTZ in performance horses is regulated state by state.
- ▶ Use of this drug may not be allowed in certain animal competitions. Check rules and regulations before entering your animal in a competition or performance 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.

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