

Amikacin Sulfate

(am-i-kay-sin)

Category: Aminoglycoside Antibiotic

Other Names for this Medication: Amikin®, Amiglyde-V®

Common Dosage Forms: Veterinary: 250 mg/mL for uterine instillation.

Human: 500 mg/2 mL (250 mg/mL) & 1 g/4 mL (250 mg/mL).

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

- ▶ Amikacin must be injected if treating infections in the body; it does not work when given by mouth.
- ▶ This antibiotic can cause damage to nerves, hearing, and kidneys. Cats may be more likely to have hearing damage.
- ▶ Amikacin is given once daily either in the vein or under the skin.
- ▶ Can be used topically (in the ear or on skin) or instilled into the uterus (horses) for certain infections.

How is this medication useful?

Amikacin can be used to treat serious infections as well as in the ear or on the skin. The FDA (U.S. Food & Drug Administration) has approved this drug for intrauterine use in horses for treating infections. The FDA allows veterinarians to prescribe and use 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 amikacin sulfate, so be sure to tell your veterinarian and pharmacist what medications (including vitamins, supplements, or herbal therapies) you give your animal, including the amount and time you give 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.
- ▶ 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 are allergic to it or drugs like it (eg, gentamicin, tobramycin, kanamycin, or neomycin).
- ▶ Rabbits.

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

- ▶ That have kidney damage.
- ▶ That are very young or very old.
- ▶ That rely on their sense of hearing for working (like assistance dogs).
- ▶ That have neuromuscular diseases (eg, myasthenia gravis).
- ▶ That are sighthounds (eg, greyhound, whippet, Borzoi)

If your animal has any of these conditions, talk to your veterinarian about the potential risks versus benefits.

What are the side effects of this medication?

Side effects that usually are not serious include:

- ▶ Stinging at the site of the shot.

You don't have to be overly concerned if you see this sign unless it becomes severe, worsens, or continues to be a problem. Contact your veterinarian if this happens.

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

- ▶ Fever, rashes, trouble breathing, and anemia may be signs of a rare allergic reaction.
- ▶ Dizziness or loss of balance may be signs of hearing or inner ear problems.
- ▶ Lack of an appetite.
- ▶ Low energy level.
- ▶ Drinking or urinating more than usual may be signs of kidney damage.

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?

Injected overdoses of amikacin can be serious and cause severe damage to the kidneys and nervous system. If you accidentally administer an overdose, 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?

Amikacin is usually given in the veterinarian's office, but animal owners sometimes give it at home by once daily subcutaneous shots (under the skin). 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.

- ▶ Your veterinarian or pharmacist will give you all of the items you need to give the shots (needles, syringes, diluent). If the medicine needs to be mixed before you give it, mix it exactly as your veterinarian or pharmacist instructs you.
- ▶ Because this drug must be injected, be sure you understand the proper dosage, location(s), and method for giving the shots.
- ▶ Use a new needle and new syringe to give each injection. Do not reuse needles and syringes.
- ▶ It is important to prevent build-up of pressure in the vial when removing doses. Your pharmacist or veterinarian will show you how to remove each dose in a way that does not cause the drug to spray back out of the vial.
- ▶ Injections (shots) may sting. If your animal objects too much, your veterinarian may be able to give you something to mix with it to decrease stinging.
- ▶ 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.
- ▶ If you are giving these shots at home, place used needles and syringes in a sharps disposal container immediately after they have been used. Your veterinarian or pharmacist will help you obtain these containers. Be careful not to accidentally stick yourself; do not attempt to disconnect the needle from the syringe. Keep containers out of reach of children and pets. Once about $\frac{3}{4}$ full, dispose of containers according to your community guidelines. Check with your local trash removal services or health department (listed online and in the city or county government [blue] pages in your phone book) to see which disposal methods are available in your area.

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 original prescription bottle at room temperature and not in the refrigerator.
- ▶ If your veterinarian or pharmacist has made (compounded) a special formulation for your animal, follow the storage recommendations and expiration date for the product.
- ▶ 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. 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?

- ▶ 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.

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