

Aluminum Hydroxide

What is aluminum hydroxide?

Aluminum hydroxide (brand names: Alternagel®, Amphojel®) is an over-the-counter oral antacid and phosphate binder, most commonly used to treat high phosphate levels secondary to kidney dysfunction (abnormal or impaired function of the kidneys). It can also be used to reduce stomach acid production.

Its use in cats, dogs, or small mammals to treat high phosphate levels is **'off label'** or **'extra label'**. Many drugs are commonly prescribed for off label use in veterinary medicine. In these instances, follow your veterinarian's directions and cautions very carefully as their directions may be significantly different from those on the label.

How is aluminum hydroxide given?

Aluminum hydroxide is given by mouth in the form of a liquid gel or in powder form mixed with food. It can also be compounded into capsules. This medication should be given immediately before food or mixed into the food.

This medication should take effect within 1 to 2 hours; however, effects may not be visibly obvious and therefore laboratory tests may need to be done to evaluate this medication's effectiveness.

What if I miss giving my pet the 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, and return to the regular dosing schedule. Never give your pet two doses at once or give extra doses.

Are there any potential side effects?

The most common side effect is constipation. If too high of a dose is used, a low blood phosphate level can occur. Rarely, aluminum toxicity can occur with its long-term use, and may cause signs such as weakness, walking difficulty, or stumbling.

This short-acting medication should stop working within 24 hours.

Are there any risk factors for this medication?

Use this medication cautiously in pets that have a gastrointestinal obstruction or are prone to constipation. Otherwise, it is generally considered a safe medication because it is poorly absorbed systemically.

Are there any drug interactions I should be aware of?

This medication can affect the amount of other medications that are absorbed, so be cautious when administering aluminum hydroxide with the following medications: allopurinol, aspirin, chloroquine, chlorpromazine, corticosteroids, digoxin, ethambutol, fluoroquinolones, gabapentin, H₂ antagonists, iron salts, isoniazid, penicillamine, phenothiazines, phenytoin, tetracyclines, thyroid hormones, and quinidine. To offset this interaction, administer aluminum hydroxide two hours before or after administering any other medication.

Be sure to tell your veterinarian about any medications (**including vitamins, supplements, or herbal therapies**) that your pet is taking.

Is there any monitoring that needs to be done with this medication?

Your pet should be monitored for side effects of aluminum toxicity as described above.

Blood phosphate levels should be monitored monthly at first to make sure the medication is working and that the dose is appropriate. Once stable, your veterinarian will monitor your pet's blood phosphate level; typically every 3 months. A complete blood count may also be monitored for signs related to aluminum toxicity.

How do I store aluminum hydroxide?

Store the liquid gel at room temperature, taking care to avoid freezing. The powder and compounded capsules should be stored in a sealed container, away from moisture and at room temperature.

What should I do in case of emergency?

If you suspect an overdose or an adverse reaction to the medication, call your veterinary office immediately. If they are not available, follow their directions in contacting an emergency facility.

Rania Gollakner, BS, DVM

© Copyright 2019 LifeLearn Inc. Used and/or modified with permission under license.