

#### **Ecovet FAQ**

#### What makes Ecovet work so well?

Bugs use scents to find things. Some odors attract bugs and some repel them. The food-grade fatty acids that we use mimic some of the repellent smells that animals naturally have on their skin. We are essentially using the bug's own navigation against itself by overwhelming that system. View the "Ecovet Explainer" video to learn more: bit.ly/ecovetvideo

#### What are the ingredients in Ecovet?

Ecovet is an EPA-registered product made from three naturally derived, food-grade fatty acids that are carried in a silicone base liquid.

# The label only lists the active ingredients and says 85% are "other ingredients." Can you tell me what those other ingredients are?

Yes! Ecovet is made of:

- three food-grade fatty acids (5% each for a total of 15%)
  (Octanoic and Decanoic are from palm kernel oil. Nonanoic is from beef tallow.)
- 84% silicone oil
- 1% fragrance

The silicone oil's job is to carry the fatty acids during application to the horse. There are a lot of different types of silicone oil as this is a very versatile compound. It is used primarily in the cosmetics and hair care industries as a detangler or to provide a lasting sheen to the coat. Our formulation is a volatile silicone oil. When exposed to the horse's skin and normal body temperature, it totally evaporates in about 20 to 30 minutes, leaving just the fatty acids. The silicone does not have any real drying properties that would affect the skin.

#### So what is a fatty acid anyway?

A fatty acid is a naturally occurring compound found in all fats and oils. They can be either solid or liquid and they are oily to the touch. They serve many important purposes in the human body. For instance, fatty acids can be sources of fuel because when they are eaten they produce large quantities of energy. Many cell types can use fatty acids for this exact purpose. They are also important in supporting and strengthening the walls of cells.

Solid fatty acids (the active ingredients in Ecovet) are safe to the touch and are not prone to breakdown. They are very stable at room temperature. Other types of liquid fatty acids can combine with oxygen and they can become rancid. One thing that makes Ecovet's fatty acids different is that they are volatile. This means that they evaporate at certain body temperatures.



#### What makes up the New Scent and what is it like?

Ecovet's "secret" formulation is 5% each of three different food grade fatty acids, 84% volatile silicone oil and 1% fragrance. The different fatty acids evaporate off of the horses at different rates, some immediately and some more slowly. The challenge in finding a fragrance formulation was locating something that blends nicely with the inherently musky scent of the natural fatty acids. We tested many things, but this time, we have found an herbal blend that we believe is a game changer!

# I heard that Ecovet uses palm kernel oil. I have concerns about palm oil production, and the horrible decimation of the forests by those trying to capitalize on the popularity of this ingredient in so many products now. What's your source?

We get our palm kernel oil from Emery Oleochemicals. Here is an explanation from Emery about Ecovet ingredients:

"The C8, 10 acids are derived from palm kernel oil from palm trees on plantations in Malaysia. It is very important to note that Emery is a member of RSPO (Roundtable on Sustainable Palm Oil), which means that we are certified that our palm kernel oil comes from sustainable farming in plantations and not as a result of depleting the rainforest (unsustainable.)"

The C9 in Ecovet is derived from tallow.

# If Ecovet works so well against the nasty flies, what does it do to the beneficials? I use Fly Predators, and I would hate to do something bad to them.

Ecovet does not seem to affect Fly Predators for two reasons: (1) Fly Predators are actually a species of parasitic wasp (Ecovet does not affect bees and wasps to an appreciable extent), and (2) the wasp typically is near poop piles and not on the animals themselves.

# <u>Is Ecovet safe to spray on wounds? My horse had a boo-boo this week and has a few stitches and some other scrapes.</u>

We have not specifically tested Ecovet on open wounds. Clinically speaking, we have had cases where it was impossible to treat the horse without some landing on the wound itself. Bottom line: We cannot advocate spraying directly on the wound but overspray has not shown any adverse effects that we know of at this time. Interestingly, there are current fatty acid skin products on the market that promote healing of wounds.



## <u>I ordered Ecovet and the label warnings make it sound very toxic. Why does it have water runoff warnings?</u>

As an EPA-registered product, we are mandated to carry basic precautionary statements. (Some essential oil products have been grandfathered in, so they are not required to carry these warnings at this time.) The statements do sound pretty scary. Initially the EPA had no restrictions around use of Ecovet in water, but when we discussed the possibility of transporting extremely large volumes (truck/train loads), they required a warning in case there was a massive spill. Every product has some toxicity in large enough amounts when released into the environment unexpectedly. In truth, fats and water do not mix well so it would take a very large amount.

#### What types of insects and pests will Ecovet repel?

It repels and kills mosquitoes, flies (Horn flies, Stable flies, Black flies, Deer Flies, Face flies, Barn flies and House flies), ticks, no-see-ums (which cause difficult-to-treat allergies) and cockroaches. Recent testing has confirmed a very low toxicity to honeybees. It repels bugs before they bite.

#### **How often do I need to apply Ecovet to my horse?**

Ecovet is long-lasting — you typically only need to apply it every one to three days depending on ambient temperature, fly pressure and rain. For certain conditions, such as sweet itch, Dr. John usually recommends initially treating the horse twice a day until the problem is under control. Because Ecovet works by evaporating and creating a repellent vapor barrier, if the horse is sweating, it may evaporate slightly faster. For more application tips, view the How to Apply Ecovet video: bit.ly/ecovetapply

# My horse is a bug magnet and is super-allergic. What's the best way to use Ecovet to help her?

Focus on treating the regions that are giving her the most trouble (usually mane, tail head and ventral abdomen). To start, apply a liberal amount until control is achieved. For an allergic horse, it may be best to start with twice-a-day treatments focusing on these regions. Sometimes using a soft cloth or mitt allows for a more effective way to apply Ecovet. Read Dr. John's blog post for more details on helping the allergic horse: bit.ly/ecovet-sweet-itch

#### **How long does Ecovet take to work?**

Its repellent effect is usually immediate but the insecticidal properties may take up to 24 hours to occur.

#### What is the shelf life of Ecovet?

The active ingredients in Ecovet (saturated fatty acids) are very stable and do not become rancid. We have bottles 3+ years old that are still effective.



#### Why did Ecovet make me and my horse sneeze?

The fatty acids in Ecovet, when delivered in spray form, do react with a small number of horses and people. Most describe it as a "sticking" sensation that does go away.

#### **Is Ecovet available outside the United States?**

Ecovet is only available in the United States at this time. We will post any updates about availability to our Facebook page: facebook.com/ecovetforhorses

#### Can I use Ecovet on pregnant or nursing mares? Foals?

We can't claim safety for pregnant or nursing mares or foals because we have not specifically done this testing. However, we have heard a lot of anecdotal reports of safe, effective treatment of these groups. Remember: A little Ecovet goes a long way!

#### Can I use Ecovet on my dog to protect him from ticks?

While Ecovet is effective against ticks, it is currently only approved for use on horses and cattle. We suggest you talk with a trusted veterinarian re: parasite protection for your small-animal companions.

#### Is Ecovet safe to use if one is pregnant?

While we have done all the studies needed for the EPA for risks associated for human exposure, we did not specifically test Ecovet in either pregnant horses or humans. As such, we cannot comment directly on this. However, to date, we have not heard of any adverse reactions.

# I sprayed my horse in the pasture and noticed later that the grassy area right where I sprayed looked like it turned brown, is this normal?

The Nonanoic fatty acid can cause grass to die in high temperatures and high humidity situations. It is best not to spray around grassy areas.

## Does the fatty acids that remain after the silicone evaporates affect tack at all? Also, if a horse is wearing medicine boots, will the fatty acids break down the neoprene?

The fatty acids will not cause any break down of any known materials. It will rarely leave a white residue that can be easily wiped off.

#### Can I use Ecovet on other farm animals like pigs, chickens, goats, etc.?

At this time, as an EPA registered pesticide, Ecovet only has authorization for use on horses, cattle, ponies, mules, donkeys and swine. We cannot approve its use on other animals. We have heard reports, however, that when used on other animals there has not been any adverse reaction.