

DiaGel™ Diarrhea Control Gel



For Dogs & Cats

PRODUCT BENEFITS:

- One-time administration
- Firms stools in 24 hours
- Eliminates bacteria
- Flushes toxins
- Maintains hydration
- Promotes GI health
- Rapid mode of action
- May be administered to pets of all ages
- May be used in conjunction with antibiotic treatments
- May be used for pre-stress



Eliminates Bacteria

One-Time Administration!



A veterinarian's "first choice" for bacterial diarrhea

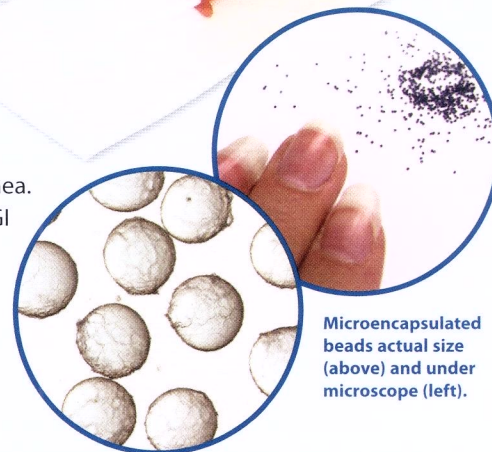
DiaGel is an orally administered product which may aid in controlling bacterial diarrhea.

DiaGel eliminates bacteria such as *E. coli* and *Salmonella* which occur naturally in the GI tract. Causes of bacterial diarrhea may include:

- Diet and/or water changes
- Environment changes
- Indiscretions in diet
- Stress

A one-time administration may firm stools within 24 hours.

- **Active compound and enhancer** eliminates bacteria fast
 - A **proprietary blend** based on research by Iowa State University
- **Pectins** soothe the GI tract
- **Tannins** help flush toxins from the body by changing the surface of bacteria which make them unable to adhere to the intestinal wall
- **Antioxidants** bind to bad bacteria and help flush them out of the animal's system before they can adhere to the intestinal wall and multiply
- **Improved palatability** makes the product easy to administer



Microencapsulated beads actual size (above) and under microscope (left).



VAN BEEK
NATURAL SCIENCE™

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DiaGel™ Diarrhea Control Gel

FOR DOGS & CATS



A veterinarian's "first choice" for bacterial diarrhea

Dog Active Ingredients:

A Proprietary Blend of (Carvacrol, Eugenol, Cinnamaldehyde, Thymol, Chamazulene), Psyllium Seed Husks, Orange Pectin, Citrus Pectin, Lemon Pectin, Cranberry Powder, Oat Bran, Carob Bean Shell, Sesquiterpenoid.

Cat Active Ingredients:

A Proprietary Blend of (Carvacrol, Thymol, Chamazulene), Psyllium Seed Husks, Orange Pectin, Citrus Pectin, Lemon Pectin, Cranberry Powder, Oat Bran, Carob Bean Shell, Sesquiterpenoid.

Inactive Ingredients:

Benzoic Acid, Chlorophyll, Glycerin, Lecithin, Miglyol, Natural Flavors, Potassium Chloride, Silicon Dioxide, Sodium Alginate, Sodium Chloride, Sorbic Acid, Sorbitan Tristearate.

Cautions:

Safe use in pregnant animals or animals intended for breeding has not been proven. If animal's condition worsens or does not improve, stop product administration and consult your veterinarian.

Veterinary Use Only

FOR USE IN DOGS AND CATS

Primary Use: DiaGel is an orally administered product which may aid in controlling bacterial diarrhea. DiaGel eliminates bacteria such as *E. coli* and *Salmonella* which occur naturally in the GI tract. Causes of bacterial diarrhea may include:

- Diet and/or water changes
- Environment changes
- Indiscretions in diet
- Stress

A one-time administration may firm stools within 24 hours.

Secondary Use: DiaGel may be used in conjunction with fluid therapy, endotoxin therapy, or antibiotics to treat secondary infections associated with other causes of diarrhea.

Pre-Stress Use: DiaGel may be administered 2 hours prior to stress-induced events (boarding, breeding, traveling, and showing) to help reduce the incidence of diarrhea.

Product Specs / Sizes:

- Syringes are individually packed in sealed tyvek peel-and-pull pouches.
- Product is packaged as 6 pouches per box per animal size.
- Tyvek packages and shelf boxes are color coordinated.
- Outside box has a perforated tear-out end for easy dispensing.
- 4 year product shelf life.

#571605 Kitten	0.5 ml syringe	Up to 6 pounds
#571606 Cat	1 ml syringe	Over 6 pounds
#570601 Small Dog	1 ml syringe	1-30 pounds
#570602 Medium Dog	3 ml syringe	31-60 pounds
#570603 Large Dog	5 ml syringe	61-120 pounds*
#570604 Dog Multi Pack	1 ml, 3 ml, 5 ml syringes	2 of each size

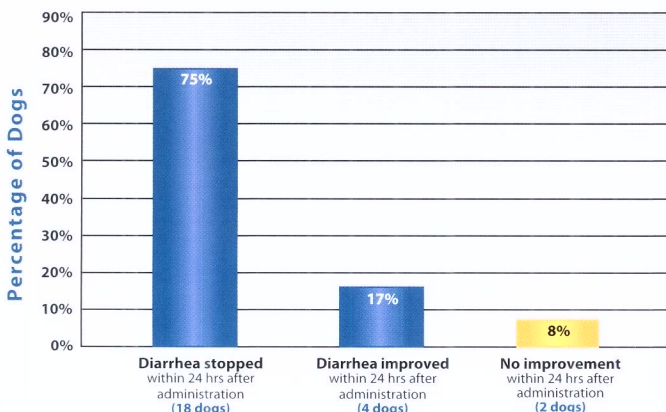
*Note: For dogs exceeding 120 pounds, administer an additional syringe(s) to equal the dog's weight.

U.S. Patent No. 6,414,036

Research

Van Beek Natural Science has conducted extensive university studies, laboratory tests and field trials on the all-natural products introduced to the market.

Clinical Efficacy Test Using DiaGel against Canine Diarrhea

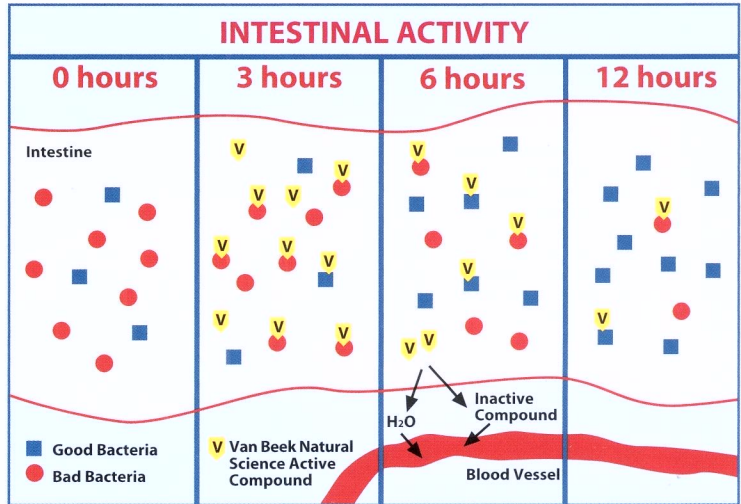


Clinical trial conducted by Arysta LifeScience in Tokyo - May 2006. DiaGel was administered to 24 dogs with cases of diarrhea. Ages from 3 months to 13 years. Weight from 5.7 lbs to 87.7 lbs.

How does DiaGel™ work?

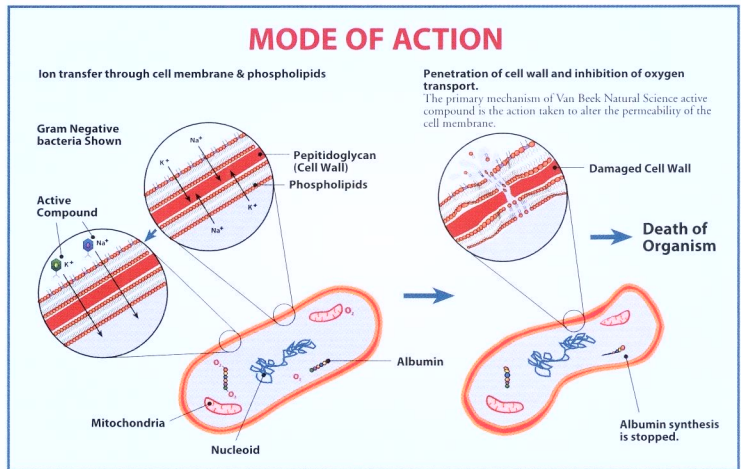
Properties of Active Compound:

The Van Beek Natural Science active compound is derived from natural plant sources and acts specifically against bacterial cells. This active compound will adhere to and affect the cell membranes of the good and bad bacteria which occur normally in the digestive tract. Due to the over-population of bad bacteria less of the good bacteria will be affected. Within 6-12 hours the good bacteria will begin to re-populate within the upper intestine and the inactive compound will be eliminated through natural body processes.



Mode of Action: Step 1: Penetration through cell membrane

All bacteria contain lipids (fats) located in the membranes of their cell walls. On contact with the cell membrane the extremely rapid efflux of intracellular constituents evoked by the Van Beek Natural Science active compound causes a leakage of intracellular substances. This action alters the permeability of the cell membrane resulting in the death of the microorganism.



Step 2: Inhibition of Albumin Synthesis

In addition to altering the permeability of the cell membrane, the Van Beek Natural Science active compound also attacks the process of cell breathing in the mitochondria in aerobic organisms. The active compound inhibits the synthesis of albumins, which are responsible for the transportation of oxygen within the cell. Therefore, by interrupting the synthesis of the albumins, the active ingredients "suffocate" the microorganism.

Step 3: Metabolism & Excretion

A major part of the Van Beek Natural Science active compound is absorbed in the intestines. The absorbed ingredients or its partially metabolized products are excreted through the kidneys leaving the body primarily as urine (H₂O). The remaining compound is excreted through the lungs in the form of CO₂.

Components of the active compound that are absorbed are mainly decomposed into indifferent metabolites. A minor fraction of the absorbed active compound conjugates into sulfates and glucuronides. Further, a minor fraction may be oxidized leaving the body in urine. Due to this specific mode of action pathogens cannot build up resistance against the Van Beek Natural Science active compound.