

CARBON 2M™ Activated Charcoal

Available in These Convenient Sizes

- ✓ 454 g pail Superfine for water mixtures
- ✓ 5.5 kg pail Coarse powder for dry use
- ✓ 6 kg pail Fine powder for dry use
- ✓ 10 kg bag Fine powder for dry use

Suggested Wood Charcoal Inclusion Rates*

Horses:	1-5% of feed per day
Dairy cows:	1-2% of feed per day
Calves:	0.5% of feed per day
Goats:	1-2% of feed per day
Pigs:	1-5% of feed per day
Sheep:	1-2% of feed per day
Poultry:	1% of feed per day

Source: Food & Fertilizer Technology Center, Asia Pacific Region

* Studies have suggested a five-day cycle of activated charcoal treatment every 14 days.

For more information about the usage of biochar in animal husbandry please consult www.ithaka-journal.net.

Inclusion of wood charcoal in animal feed is regulated by the CFIA. A nutritionist and veterinarian should be consulted prior to adding activated charcoal to livestock and pet diets or treatments.

Carbon 2M is being independently tested in these respected universities:



Titan has partnered with PMT a Canadian leader in animal nutrition products, with focus on health and performance, to distribute Titan Carbon 2M products through your preferred Livestock Centres, Retailers and Feed Mills.



Titan believes that converting wood into biocarbon products will make the world and our country just a little bit greener.

Approved for organic production /
Approuvé pour la production biologique



For more information please contact:

PMT Group
☎ 1-800-299-7904
✉ pmt@pmtgroup.com

Titan Clean Energy Projects
☎ 306-734-2222
✉ info@titan-projects.com

LIVESTOCK SOLUTIONS *Naturally*



What is Activated Charcoal?

Charcoal, or biochar, is a completely natural product that has been used to adsorb toxins for thousands of years.

Egyptians used it as an antidote to poisoning, and the ancient Hindus filtered their water with it. To this day, charcoal is the most common way of filtering water around the world.

Studies have shown that it can lead to significantly increased crop production in poor soils. Added to the garden, it gives beneficial soil bacteria a good place to live.

Charcoal can also be used like baking soda to absorb humidity and unpleasant odors.

There is no end to what this natural product can do - and it is all because of the physical and chemical makeup of carbon itself.

How it's Made

At Titan, we shred and grind clean forestry wood at our 50-acre site in Craik, Saskatchewan. The chips are then heated at high temperature in the vacuum of our proprietary pyrolysis unit to produce Carbon 2M.



Carbon 2M Testimonials

Please visit Titan's Carbon 2M page at:

www.titan-projects.com/carbon-2m-the-feed-suppliment

How it Works

Toxins such as dioxin, glyphosate, mycotoxins and pesticides are efficiently bound by the charcoal, mitigating adverse effects on the digestive system and intestinal flora. Studies have shown that overall health is improved as well as meat, milk and egg production. Animals immune systems are stabilized and risk of micro-organism infection decreases.

Source: *Biochar in poultry farming* Ithaka Journal 1 | 2012

For more information about activated carbon products, please visit these websites:

- biochar-journal.org
- charcoalremedies.com
- agbiochar.com
- comfortgutusa.com
- buyactivatedcharcoal.com/pure-non-scents-odor-control

Use of Biochar in Livestock Farming

Excerpt from: *The Ithaka Journal*
By Achim Gerlach and Hans-Peter Schmidt

90% of the biochar [charcoal] produced in Europe is used in livestock farming. Whether mixed with feed, added to litter or used in the treatment of slurry, the positive effect of biochar very quickly becomes apparent. The health – and consequently the well-being – of the livestock improve within just a short space of time. In regard to nasty smells and nutrient losses, the use of biochar could even herald a new age of livestock farming, closing agricultural cycles of organic matter.

From an international perspective, we are currently seeing repeated reports on the advantages of mixing biochar into animal feed.

DoThiThanVan (2006) stated that it's used with goats in North Vietnam, and growth rates improved when feed included 0.5-1g of charcoal/kg wt. per day.

Kana et al. (2011) have shown that 0.2-0.6% charcoal added to chicken feed results in significant weight increases...and reduction in ammonia.

Iwase et al. (1990) have demonstrated – in an experimental environment – the storage effect of activated carbon in rumen acidosis in Holstein bulls.

Leng et al. (2012) proved that methane formation could be reduced by 12.7% (10%) when 1% (0.5%) char is added to an artificial rumen system.

Kruger (2012) stated that when glyphosate gets into the digestive tract of animals and humans, it causes detectable changes in the gastrointestinal microbiota. A good prophylactic, metaphylactic and therapeutic possibility of binding botulinum toxin and other toxins... in the gastrointestinal tract of cattle seems to be the administration of biochar.



Excerpt from: *Activated Charcoal*, in *Drugs and the Pharmaceutical Sciences* Vol 9, 1980
By David O Cooney

Charcoal added to the diet of sheep for six months did not cause a loss of nutrients, as compared with sheep not receiving charcoal. A level of 5% of the total diet was given [and] it did not affect the blood or urinary levels of calcium, copper, iron, magnesium, inorganic phosphorus, potassium, sodium, zinc, creatinine, uric acid, urea nitrogen, alkaline phosphatase, total protein or urine pH.