

Project: KatFresh

Analytical report no **127617/2011**

Comparative study with respect to the absorptive properties of the product katFresh in comparison with high absorptive quality activated carbon.

EFFECTIVENESS

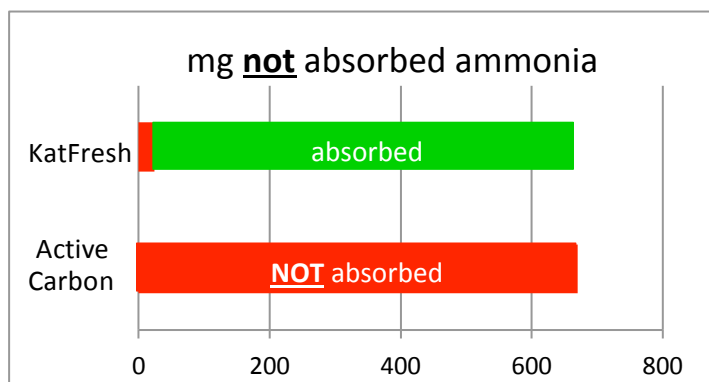
The effectiveness of a filter filled with KatFresh in the filter-holder of a litter box is investigated in comparison with a same shaped filter filled with the activated carbon.



The image shows the impression of the setup of the measurement unit (measurements are performed with closed lid).

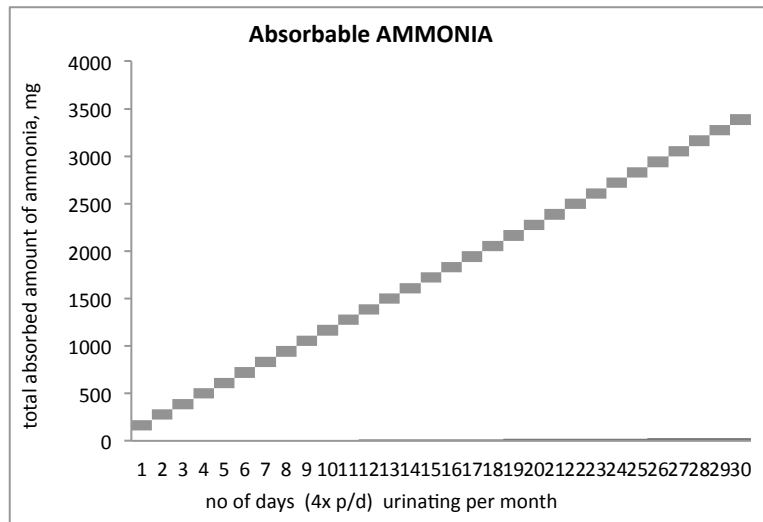
On basis of a one hour measurement (first hour direct after use by the cat) KatFresh absorbs approx. 25 times as much in comparison with activated carbon.

The graph shows the significant better absorption of the KatFresh.



A cat urinates 3 to 5 times per day. In total a cat urinates average 20 – 44 ml per kilogram of bodyweight^{*1)}. A full-grown cat weighs approx. 3,5 kg.

This implicates that a cat urinates approx. 28 ml per time. The average ammonium concentration is determined at 120 mM. Calculation based on these data gives a total amount of ammonia of 3600 mg per month.



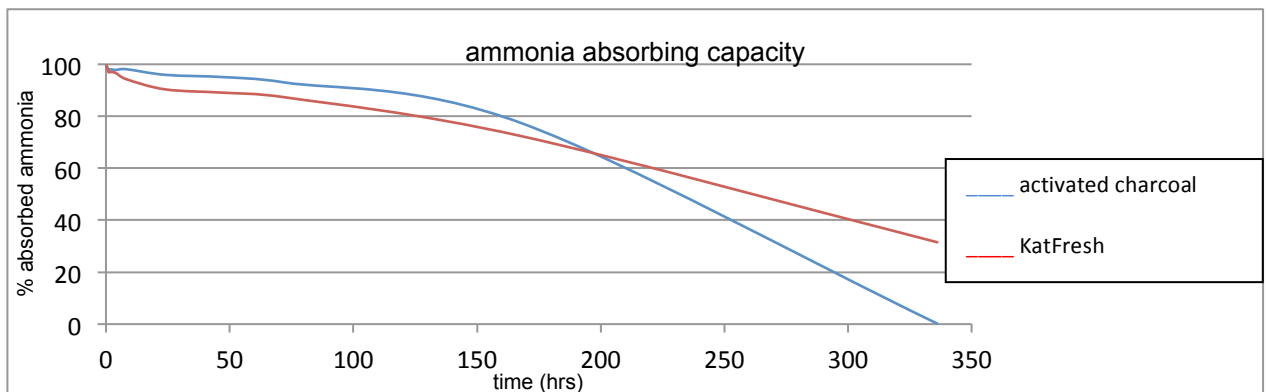
*1) <http://www.cat-health-guide.org/cat-urine.html>

SUSTAINABILITY

As a reference for the laboratory sustainability test a relative concentrated ammonia solution is used. Ammonia is a substance with an irritating smell which occurs in the urine of cats. Up to a concentration of approx. 300mM^{*2)}.

*2) zie *Journal of Nutrition*. June 1, 2002 vol. 132 no. 6 1754S-1756S

The graph below shows that the sustainability of KatFresh is considerable better than the same of activated charcoal.



CONCLUSION

Laboratory analyses indicate that KatFresh performs better in both effectiveness and sustainability in comparison with equal amounts of activated carbon.