

Comparison hygiene powders

MS DryCare vs Deltasec



MS DryCare



Deltasec

■ Goal:

MS DryCare and Deltasec are both hygiene powders or active drying agents used in all kinds of animal pens. There are several unique attributes making a hygiene powder useful. In the first place it needs to absorb moisture, that is why you use it in the first place. Other attributes are things as the pH-level, feeling on the animals' skin, smell and convenience for the farmer and animal.

■ Methods:

When testing the ability to absorb moisture, the standard way to do this is by measuring the mass of moisture the drying powder can absorb. This translates to 50g of powder in a filter completely submerged for a good 10 minutes. After that we let the filter drip out for 2 minutes and the netto weight can be measured. Because we used 50g of powder at the start, we know that the extra weight in the end is all moisture that has been absorbed. After that, we sift it to check for substance and use demiwater to check the pH-level. The smell is measured by the researcher based on perception.

■ Results:

	Absorption >200%	pH-level	Substance	Dusting	Smell
MS DryCare	Yes	9.05	Very soft	Very little	Eucalyptus
Deltasec	Yes	8.19	Hard, pointy and sharp	Very much	Smells like sawdust

The results of the first experiment show that both powders can absorb more than 200% water, which, with normal use, is more than enough. We have to note that Deltasec can absorb a little more water than MS DryCare.

In the second experiment we tested the pH-level of both powders. This should be between 7 and 10 to not harm the animal. Closer to the edge of this bandwidth results in a lower pathogen growth.

In the third experiment we check whether the substance of the powder can be harmful for the skin of the animal. Especially the delicate skin of piglets needs a soft touch. MS DryCare is a very soft powder which stays rather soft and granular even when its saturated. Deltasec, based on sawdust and small pieces of wood, is very sharp and can potentially be harmful for the skin. For convenience of the farmer and animals, we check for dusting and smell as well. When applying MS DryCare in the animal pens, almost no dust came of, which makes it possible to use it without a mask. Deltasec can't be applied without a mask, the dust will come in your (and the animals) respiratory system and is very irritating. Furthermore, MS DryCare has a strong eucalyptus fragrance which suppresses the smell in the animal pen a little. Eucalyptus is normally used in cough medicine to open up the airways and improves the animals' health. Deltasec smells like sawdust, which smells very natural, but has no further use.

■ Conclusion

We can conclude that both hygiene powders can absorb more than enough moisture and can be used in animal housing to reduce the pathogen pressure. However several attributes of MS DryCare are better suited for the use around animals. The pathogen pressure is even further reduced with a slightly higher pH-level, the powder is very soft to the skin in contrast to Deltasec. The smell of Deltasec, which is sawdust, is natural, but because of the enormous dusting it irritates the respiratory system of both farmer as animals. MS DryCare smells like eucalyptus which is known to be good for the respiratory system.

In the end we want to point out that these experiments have been done in a laboratory and actual results in the stable can differ.