North American Spray Dried Blood and Plasma Producers
and
European Animal Protein Association

Statement of Safety Regarding Spray Dried Porcine Blood Products

Recently several cases of African Swine Fever (ASF) have been reporting in different regions, including China and Eastern Europe. The North American Spray Dried Blood & Plasma Producers (NASDBPP) and the European Animal Protein Association (EAPA) wish to inform our global customers and industry partners of the biosafety steps involved in manufacturing safe and effective feed ingredients derived from blood.

Commercial spray-dried blood products are safe ingredients for use in animal feed.

Spray-dried porcine plasma is used globally in feed to enhance weaned pig performance and can be used to significantly reduce mortality and medical treatments of nursery and growing-finishing pigs.

Heat treatment of 80°C throughout substance of meat and dairy proteins is recognized **to inactivate many viruses** including Foot and Mouth Disease, Classical Swine Fever, Swine Vesicular Disease, **African Swine Fever**, Avian Influenza, Newcastle Disease, Rinderpest, and Sheep and Goat Plague **(EU Directive 2002/99/EC, Annex III).**

During production spray-dried blood products for use in animal feed are heated to **80°C throughout substance.** Research has shown that spray drying inactivates several swine viruses including African Swine Fever.

Virus	**Inactivation Logarithm**	**Reference**
Porcine Reproductive and Respiratory Syndrome virus (PRRS)	> 4.0	Polo et al., 2005
Pseudorabies virus (PRV)	> 5.0	Polo et al., 2005
Porcine Epidemic Diarrhea virus (PEDV)	> 5.2	Pujols & Segales, 2014
Porcine Epidemic Diarrhea virus (PEDV)	> 3.6	Gerber et al., 2014
Swine Vesicular Disease virus (SVDV)	> 6.0	Pujols et al., 2007
African Swine Fever virus (ASF)	*4.1*	*CReSA, 2018 unpublished*

The **World Health Organization (WHO)** recognizes that a reduction of 4 logarithms (logs) of virus assures viral safety of human plasma products used for transfusions. Inactivation means that the virus is killed or not capable of replicating.

4 logs of virus inactivation is equivalent to inactivating 99.99% of a virus.

Members of NASDBPP and EAPA manufacture spray dried blood products with several independent features that contribute to the safety of blood products.

1. Blood is **ONLY** collected from healthy animals to be slaughtered for human consumption.

2. Collected blood is pooled from multiple animals which contributes to a dilution effect. **Pooling is a recognized biosafety feature for human plasma products used for transfusions**.

3. The spray-drying process at high temperatures (**80ºC throughout its substance**) has been shown to be and is accepted as effective in inactivating heat resistant viruses, including non-enveloped or enveloped viruses (**EU Directive 2002/99/EC, Annex III)**.

The scientific evidence indicates that spray-dried porcine blood products are safe and that the spray-drying process effectively inactivates tested swine viruses, including African Swine Fever.

Therefore, the spray-drying processes used by the NASDBPP and EAPA members for spray drying blood products are aligned with the WHO guidelines, providing several independent safety features that assure that the final product are safe from pathogens of concern for the swine industry, including ASF virus.

Additional questions may be directed to:

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References: Available upon Request