

Storage conditions for Granovit Zoofeed feedstuff

Introduction

In principle, the storage room or storage facility (as well as the transport room) should be clean (absolutely empty, odourless and dry) and suitable for storing feed in order to be able to store it with a manageable risk.

The main risks in feed storage are the degradation of nutrients, microbiological spoilage and external contamination (e.g. by pests/moisture/chemicals etc.). All these risks can be avoided for a certain period of time through suitable storage conditions to ensure an appealing appearance, good flavour and a long shelf life.

Microbiological spoilage

There are two important physical factors that influence the quality of animal food in storage: Temperature and humidity. Microbiological spoilage occurs if the moisture content of the feed is too high. To minimise this risk, Granovit Zoofeed regularly measures the residual moisture content of the feed batches produced and only releases the batches if the residual moisture content is within the specified limits.

Moulds are organisms whose growth is favoured in a humid environment. They generate additional moisture and thus accelerate the growth of bacteria. To avoid this, storage must fulfil essential conditions.

The feed has a defined residual moisture content after production. To avoid recontamination with moisture after production, the relative humidity in the store should be below 75% at a temperature of no more than 25°C. Furthermore, direct contact with water must be avoided (during transport, loading and unloading as well as during storage itself).

Nutrient degradation

From a nutritional point of view, the degradation of nutrients (especially vitamins) must be monitored. A certain amount of vitamin degradation over the shelf life is normal and taken into account. The aim is to ensure that the animal's minimum nutritional requirements can still be covered by the feed at the end of the shelf life.

To ensure this, storage at moderate and constant temperatures and without direct sunlight is absolutely essential (10-25°C).

Contamination from the outside

Storage rooms or storage facilities should be designed in such a way that thorough cleaning is easy and safe. Smooth, hygienic surfaces on floors and walls make this easier. The fewer joints, cracks, cavities and difficult or inaccessible areas a storage room has, the easier it is to inspect and keep clean.

Also, no undesirable substances should be stored or worked with in the immediate vicinity of the premises (e.g. mineral oils, chemicals, cleaning agents, etc.).

The construction of the building or the storage facility itself should be designed in such a way that rodents (rats and mice), birds (pigeons and sparrows) and other animals (e.g. insects) cannot enter.

The feed must be stored in suitable containers or rooms. Open storage, for example in an open feed bag, can lead to increased humidity and facilitate the formation of mould. In addition, pests such as mites can easily get into the feed.

Granovit Zoofeed recommendation for appropriate storage

We define the term "suitable storage" as dark (UV-protected), dry (<75% humidity) and cool (10-25°C) as well as closed (closed room/closed containers/originally sealed packaging).

1. The food must not be exposed to direct sunlight during storage.
2. Temperature fluctuations of 10°C should ideally NOT be exceeded. This is to avoid the formation of condensation water.
3. To ensure a long shelf life of the pellets and extrudates, temperatures below 0°C must be avoided. No freezing temperature.
4. The feed must be stored in closed bags, not directly on the floor (only on pallets) and without direct contact with the walls and/or adjacent pallets.
5. The relative humidity of the air must be below 75%.
6. All covers, plastic and pallet protection films must be removed immediately after receipt of the delivered feed.
7. For some special feeds (especially supplements in plastic buckets), storage in air-conditioned rooms (cold room/refrigerator at 2-8°C) may be recommended. This is indicated on the data sheet and/or the label of the corresponding feed.

With kind regards

Your Granovit Zoofeed team