

New protective packaging for preservation of

Hemp / Cannabis

Preserve its quality, increase your profits



Upon harvest, the bioactive components of cannabis begins to degrade. To preserve them, particularly the CBD and THC levels, it is critical to keep it free from oxygen, humidity, light and a stable temperature. This poses industrial processors for a major challenge: how to preserve the hemp/cannabis after harvest, in large volume, over an extended period of time, without major investments and loss of the cannabinoids?

The vQm Packaging system offers a simple, fast and reliable way for intermediate-bulk storage of hemp products. Once the product has an optimum moisture content, it can be packed under low oxygen and/or vacuum. The extreme gas, light and moisture barrier of the packaging ensures that the aging process of the product is minimized, while preserving CBD and THC levels.

- Prevents oxidization
- Preserves color and aroma
- Extends the shelf life
- Avoid the development of mold, fungus, and bacteria
- Eradicates weight loss during storage / logistics

Optimum conservation conditions

To achieve this, the vQm system uses a patented, high-speed valve (2-way), which is sealed inside the vacuum-proof, high-barrier liner. The special conditioning unit allows you to quickly evacuate residual air in the packaging (to a desired vacuum level) and subsequently inject nitrogen, to create a low-oxygen, inert and/or vacuum condition.

The stability of cannabis and its preparations on storage

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"Solutions of pure cannabinoids, nine samples of herbal and two of resin cannabis (one freshly prepared) were stored in varying conditions for up to 2 years. Exposure to light (not direct sunlight) was shown to be the greatest single factor in loss of cannabinoids especially in solutions, which should therefore be protected from light during analytical and phytochemical operations. Previous claims that solutions in ethanol were stable have not been substantiated. The effect of temperature, up to 20°, was insignificant but air oxidation did lead to significant losses. These could be reduced if care was taken to minimize damage to the glands which act as "well filled, well closed containers". Loss of tetrahydrocannabinol after exposure to light does not lead to an increase in cannabinol, but air oxidation in the dark does."



Relative humidity

The high barrier properties of the film that is used for the liner, in combination with the hermetic closure, allows you to **maintain the optimum moisture content** of your product during the complete supply chain, from the moment of packaging. Minimize external influences on your product due to high humidity, condensation or direct water contact.



Preservation of taste and aroma's.

The volatile compounds that determine the distinct aroma of the cannabis, can best be preserved in hermetic, anoxic or vacuum conditions.



UV Exposure

Exposing cannabis to UV after it has been harvested, will degrade THC. The high barrier liner and/or outer packaging can prevent the influences of the UV.



Nitrogen flushing

Oxygen is the major cause of degradation of the bioactive components, in particular cannabinoids. Under vacuum and/or by flushing the packaging with nitrogen, the available oxygen is reduced. The high barrier properties inhibits fresh oxygen from outside to come in.



Temperature

High temperatures can create an increase of molds, to control this the product should be stored at temperatures below 16 – 21°C (60-70 °F).

