

# Water Activity Analysis

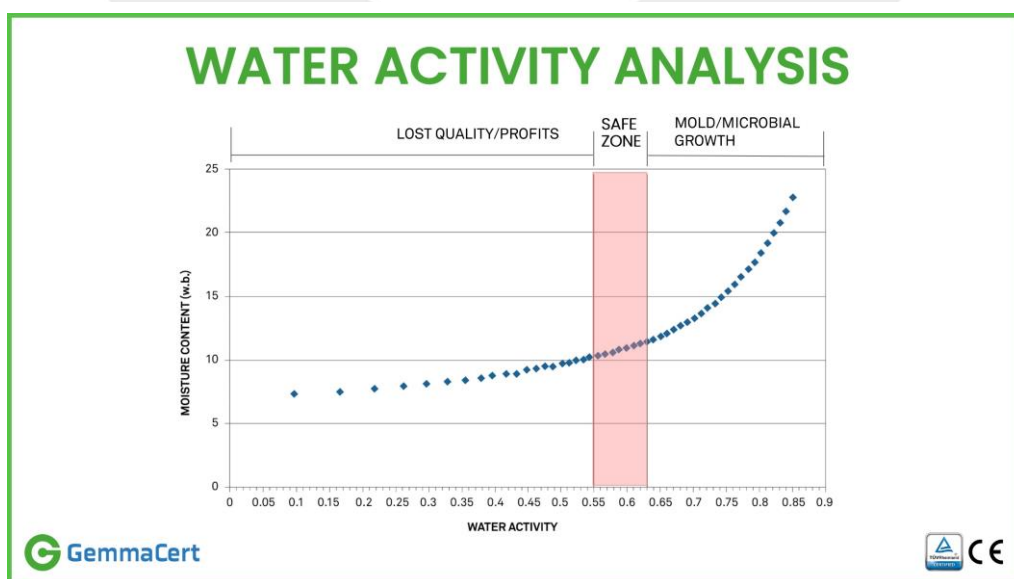
## Safe for Storage & Transport



- GemmaCert analyses **Water Activity (aw)** to help predict if your cannabis/hemp is safe to store and transport.
- Water Activity is a widely used metric for food and pharmaceutical safety.
- Water activity is a better index for microbial growth than water content (moisture %).
- It is critical for predicting growth of bacteria, yeasts, mold, oxidation and premature THC decarboxylation.

**Optimum water activity range is between 0.55 – 0.65.**

- Low water activity, **under 0.55**, means product is too dry, trichomes are brittle, delicate, and less potent or destroyed, risking profitability.
- High water activity, **above 0.65**, means product is too wet, possibly causing contamination and mold, exposing customers to unnecessary health risks and risking your company's brand and reputation.



- Available on GemmaCert devices via the latest over-the-air software update. Results will appear on the GC smartphone app along with THC and CBD potency.
- For accurate water activity analysis of dry flowers, a whole flower must be analysed, **not** ground material.
- Grinding of flowers leads to water loss and results will not reflect the actual water activity level.

***Background: What is water activity?***

- Water activity, or  $a_w$ , is a measure of the free moisture in a product.
- The water activity of cannabis describes the degree to which water is “bound”, and its availability to participate in chemical/biochemical reactions and growth of microorganisms.
- Water activity better predicts the growth of microorganisms because microorganisms can only use available water.

For any questions, contact: [support@gemmacert.com](mailto:support@gemmacert.com)