



The THICK™

Regulatory Position & Scientific Safety Statement

Purpose

This document provides general information regarding the regulatory and scientific design principles of The THICK™ for manufacturers evaluating its use within regulated cannabis markets.

The THICK™ was intentionally developed using a conservative formulation philosophy centered on ingredient safety, chemical stability, and predictable physical behavior. Rather than designing to satisfy only the minimum requirements of individual jurisdictions, The THICK™ was formulated around the ingredient-related requirements of the most stringent state-level regulatory framework currently adopted within the U.S. regulated cannabis industry - a deliberately conservative benchmark, since individual state requirements continue to evolve and vary.

Because The THICK™ is proprietary intellectual property, its specific ingredient identities and formulation remain confidential and are not publicly disclosed. This document explains the regulatory and scientific design philosophy of the product without revealing protected intellectual property.

Regulatory & Safety Design Philosophy

The THICK™ was engineered around conservative formulation principles that naturally align with many of today's regulatory expectations while supporting consistent product performance.

Every ingredient was selected only after satisfying multiple design objectives simultaneously:

- Naturally occurring, plant-derived origin.
- Food-grade ingredients selected for their established safety profiles.
- Predictable chemical and physical stability under intended use conditions.
- Neutral color and aroma characteristics.
- Compatibility with cannabis concentrates and naturally derived terpene systems.
- Elimination of lipid carrier oils.
- Elimination of artificial and synthetic ingredients.
- Support of the patent-pending reverse azeotropic formulation architecture.

This multi-criteria design approach allows The THICK™ to function as an effective viscosity modification system while remaining consistent with a conservative regulatory and scientific philosophy.

Scientific Design Considerations

When evaluating inhalable formulations, chemical structure plays a significant role because it influences aerosol behavior, volatility, and how materials interact with the respiratory system.



Cannabis concentrates and botanical terpene systems consist primarily of non-polar hydrocarbons and terpenes rather than triglyceride-based lipids. For this reason, a viscosity modification system was designed to remain within the same general chemical class whenever practical instead of introducing lipid carrier systems possessing fundamentally different physical and biological characteristics.

Lipid carrier oils, including Medium Chain Triglycerides (MCT), have become prohibited within numerous regulated cannabis markets because of concerns regarding their behavior following inhalation. Unlike hydrocarbons and terpenes, triglycerides are fats and therefore present fundamentally different scientific considerations within pulmonary tissue.

Accordingly, The THICK™ was intentionally designed without lipid carrier oils and instead utilizes chemically stable, non-lipid ingredients whose physical characteristics more closely complement cannabis concentrates and terpene systems.

Rather than relying upon a heavy non-volatile carrier, The THICK™ utilizes a patent-pending reverse azeotropic volatility gradient. Through a carefully engineered stepwise boiling-point profile, progressively lighter components entrain higher-boiling constituents into a sustained aerosol, allowing viscosity modification while maintaining vaporization behavior that remains consistent with cannabis concentrates and terpene systems.

Regulatory Compliance Summary

The table below summarizes how The THICK™ aligns with ingredient-related requirements commonly found across regulated cannabis markets.

Regulatory Design Consideration	The THICK™
Naturally occurring ingredients	✓ Yes
Plant-derived ingredients	✓ Yes
Food-grade ingredients selected for established safety profiles	✓ Yes
Neutral color and aroma	✓ Yes
Artificial ingredients	None
Synthetic ingredients	None
Lipid carrier oils	Not Utilized
Vitamin E Acetate	Not Present
Medium Chain Triglycerides (MCT)	Not Present
Polyethylene Glycol (PEG)	Not Present
Vegetable Glycerin (VG)	Not Present
Diacetyl	Not Present
Squalene	Not Present

Predictable chemical stability	✓ Yes
Patent-pending reverse azeotropic formulation architecture	✓ Yes

Manufacturer Responsibility

The THICK™ is supplied as a proprietary formulation ingredient for use by licensed manufacturers.

Final regulatory compliance is determined by the manufacturer based upon the complete finished formulation, manufacturing practices, required analytical testing, product labeling, and compliance with all applicable laws and regulations governing the jurisdiction in which the finished product is manufactured or sold.

This document addresses the design philosophy and ingredient selection principles of The THICK™ and is intended to assist manufacturers during their own regulatory evaluation and due diligence process.

As with any inhalable product, no aerosolized formulation should be considered completely without risk. The lungs are designed to exchange air, and inhalation of any aerosol—including cannabis vapor or combusted cannabis smoke—introduces foreign material into the respiratory system. For that reason, inhalable products should always be manufactured responsibly and used in moderation.

Ongoing Commitment

Cannabis science and regulatory requirements continue to evolve as additional research becomes available.

Lab Effects continuously monitors emerging scientific literature, toxicological research, and regulatory developments throughout the regulated cannabis industry. As new evidence and regulatory guidance become available, our formulation guidance and technical documentation will be updated accordingly to ensure customers continue to receive current, scientifically informed information.