Proprietary Extraction Process

TruEase® utilizes an advanced extraction and purification process called Simulated Moving Bed (SMB) Chromatography.

Chromatography is the process of separating materials, allowing one to isolate and concentrate certain compounds (such as CBD, CBN, CBC and CBG) for desired formulas. The significance in understanding the differ-ent extraction processes when selecting hemp ingredi-ents is of the utmost importance. While many traditional methods lack efficiency, use a non-continuous process and require large amounts of solvents, TruEase® utilizes a proprietary method known as Simulated Mov-ing Bed (SMB) Chromatography.

SMB has been clinically proven in a number of industries – from oil and energy to functional foods, biomedicine and nutraceuticals – for its purification results and success in recovering active ingredients. Compared to traditional chromatography methods, such as column chromatography, SMB is more practical and less expen-sive to use for large-scale production of hemp oil and the purification of its relevant compounds.

SMB's efficiency is unmatched because it uses a contin-uous method and the separation zone is large and able to maintain a constant width. During column chromatography, the separation zone decreases throughout the process and compounds are often unable to be separat-ed due to a shorter column length.

Another advantage of using SMB is the fact that there is no need for excessive solvents due to its ability to sep-arate compounds throughout the continuous process. During column chromatography, there is stationary phase that is largely under-utilized and thus requires an intense amount of solvents to complete the separation. Furthermore, the linear method of column chromatography results in the process having to be repeated sever-al times to achieve similar purification results as SMB's continuous method.

Compared to traditional chromatography methods, **SMB is more practical and less expensive** for production and extraction of hemp oil and the purification of its relevant compounds.

SMB Advantages	Characteristics
Highly Efficient Method	The separation zone is large and able to maintain a constant width ensuring the highest concentration and purity.
Continuous Process	By utilizing a series of connected columns, SMB maintains a continuous process that eliminates the need to be repeated several times.
Zero-To-Minimal Solvents	Unlike column chromatography, the SMB separation process does NOT require excess amounts of solvents.
Practical Collection Points	SMB allows for desired components to be collected at different points, ensuring economic and time practicality.

The **continuous process of SMB allows for the desired components to be collected at different points**, ensuring high purification without the need to be repeated several times.