Ligar® & maratek
Automate | Optimize | Scale

MIP CANNABIS PROCESSING

Molecularly Imprinted Polymers

- Elimintate the need for winterisation
- Rapidly produce full spectrum extracts
- Rapidly purify large volumes of extract without distillation

ligar.nz

maratek.com

est. 1967

Introducing MIPs and Mipillate™

Mipillate™

- Concentrated full spectrum cannabinoid extract
- Maintains cannabinoid profile of the crude extract, including acid forms
- Terpenes levels in the extract can be modified depending on MIP used
- Pesticides and heavy metals reduced significantly

Crude hemp extract

Mipillate™

Maratek has partnered with MIP-specialists Ligar to introduce molecularly imprinted polymers (MIPs) to the cannabis processing market.

MIPs are a revolutionary new technology for separating and purifying molecules. The MIP system rapidly produces Mipillate™, an evolution of distillate.

Mipillate™ is a high value, full spectrum cannabinoid extract that includes all of the cannabinoids present in the crude extract, including the acid forms.

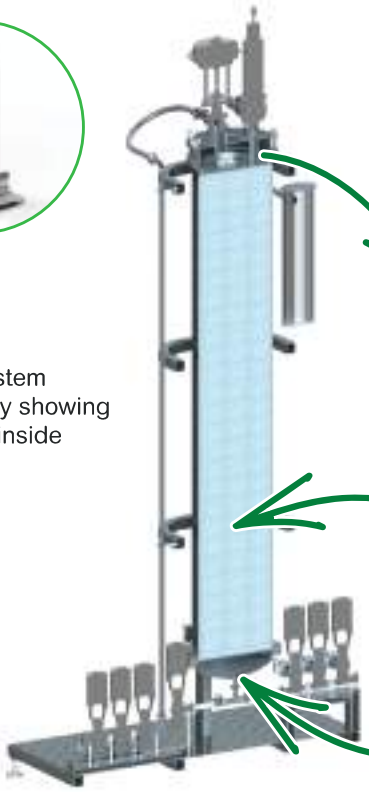
It is produced without the need for decarboxylation, winterization, distillation or reformulation, using a rapid and scalable process.

Benefits & value

- Eliminates the need for winterisation, instantly reducing cost
- Rapidly produces Mipillate™, a higher value end product
- Delivers increased throughput and lower cost of production per kg
- System scalability offers economical large volume processing
- Pass-through of contaminants increases ability to use hemp at scale

The MIP system

MIP system process



MIP system cutaway showing beads inside

4. Solvent recovery process concentrates cannabinoids

3. Captured cannabinoids are recovered from the MIP beads

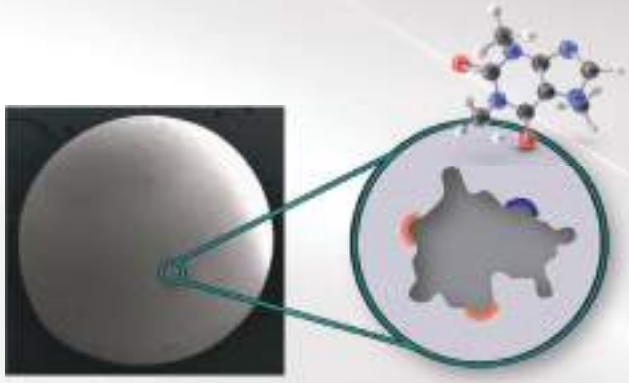
2. MIPs capture cannabinoids, non-target molecules pass through

1. Crude extract is pumped through the column of MIP beads

What are MIPs?

Molecularly Imprinted Polymers are ‘smart’ materials that have the ability to capture specific molecules or groups of molecules from liquids.

MIP beads are created using template molecules which, once removed, leave nano-scale cavities that capture the target molecules when they come in contact.



About Maratek

Maratek is an award-winning industry leader in the solvent recycling and cannabis & hemp oil production industries. We strive for the highest safety and quality standards with all of our equipment designated as Class 1 Division 1 certified, and UL listed using only North American stainless steel, parts and labor.

For over 50 years, Maratek has been engineering and manufacturing environmentally-friendly, high quality products that recycle solvents for the printing, coatings, automotive, aerospave, food and paint industries.

Maratek can also provide world-class engineering services to integrate systems and provided closed loop cannabis/hemp oil production processes.

About Ligar

Ligar is developer and manufacturer of commercial scale purification systems using MIPs, one of the first in the world to do so. Based in Hamilton, New Zealand, the company has built up an expert team that partners with companies globally to develop systems which solve problems that current technologies do not address.

Aside from recovering high value molecules from plant extracts, applications range from removing flavor taints from wine - such as smoke taint from bush fires - to removing specific pollutants from water.

Contact

Contact us now for a quote.

Call: 905.857.2738 | Toll Free: 1.800.667.6272 | Email: sales@maratek.com | www.maratek.com

Canada
39 Nixon Road
Bolton, Ontario,
Canada,
L7E 1K1

USA
250 Monroe Ave
NW, Suite 400
Grand Rapids, MI
49503

Mexico
Fuente Bella 3299,
Ciudad de Mexico,
14130,
Mexico

maratek
Automate | Optimize | Scale