

# CASE STUDY - ESSENTIAL OIL PURIFICATION

### Need:

Customer needed to isolate high value compounds (essential oils) out of resins from natural products.

#### **Process:**

TMC uses a combination of centrifugal molecular distillation (CMS) followed by fractionation in a glass column still.

## **Centrifugal Molecular Distillation**

Rate: 20 lbs. / hr. (pilot stills) to 200 lbs. / hr. (production stills)

Temp: Processed under vacuum between 100° - 250° C

Duration: 1-2 seconds

### **Fractional Distillation**

Rate: up to 30 lbs. / hr.
Temp: 25° - 300° C
Theoretical Plates: 20 - 50

### **Benefits:**

- Isolation of high valued compounds

– Purity levels > 90% – Improved aroma

No capital outlayRemoved color

Rapid turnaroundBetter clarity



Our Centrifugal Molecular Distillation selectively concentrates the desired compounds while removing the unwanted impurities. Through our process, we gently accomplish decolorization, purification and/or concentration of your products without danger of oxidation, decomposition or thermal degridation.

For more information on how TMC Industries Inc. can benefit your company as a tolling partner, please contact: