



## FREQUENTLY ASKED QUESTIONS

### Where are you based?

Our extraction plant is based in Kula, Northwestern Bulgaria while agroCO<sub>2</sub>'s office headquarters is located in central Sofia.

### What services do you provide?

We are specialized in supercritical fluid extraction with CO<sub>2</sub> (SFE) of herbs, seeds, grains, nuts, fruits and oil-bearing crops, which can be used as flavors and fragrances, nutraceutical ingredients and natural colorants in the feed, food and beverage industries. agroCO<sub>2</sub>'s expertise lies in toll & contract manufacturing services. In addition we offer contract growing of crops on our 5000 ha of farmlands located in the surrounding Danubian Plain.

### What are the properties of the CO<sub>2</sub> installation?

We operate a custom-built extraction plant, which we launched 4 years ago. There are 3 extraction vessels, each with 600L extractor volume, along with 2 separators. 3000 kg CO<sub>2</sub> /h is a typical operating flow rate. The extraction temperature can be set up to 75 °C. There is also the possibility to use co-solvents in our plant.

### What capacity do you have?

Our industrial extraction capacity is 3x600L and the maximum pressure is 400 bar. Our monthly processing capacity of raw materials is in the range of 75-150 MT. On a yearly basis, we currently process approximately 1500 MT of a large variety of raw materials. Our molecular distillation unit has four stages and has a throughput capacity of 30 kg feed /h.

### What can you extract?

Almost any natural substance, in particular containing lipophilic (non-polar or slightly polar molecules). So far we have completed full pilot tests on almost 100 different feedstocks. Apart from the extraction of nutraceutical, flavouring or

cosmetic ingredients, we also defatten and deodorize raw materials, to obtain high quality and stable protein or fiber products. We can also remove various pesticides from both extracts and raw materials and fractionate liquids. Introduce us to your idea or problem and we can brainstorm and test solutions for you.

### **Do you run R&D projects?**

Yes. You can consult our science team to determine the feasibility of your project idea or identify the optimum parameters for your project by utilizing our lab (600mL) & pilot scale (3x25L) testing.

### **What are the minimum quantities for processing?**

For industrial production the minimum is 10 MT. For lab testing we need as little as 5 KG, whereas for pilot scale projects 100-500 KG would be sufficient depending on the project.

### **What are your prices?**

They can vary greatly - from one type of raw material to another. A number of factors that need to be taken into account in order to provide you with an exact price offer. This is why we usually start every new partnership with a lab test or a pilot project - to determine the optimal extraction parameters of your raw material and therefore our costs. Alternatively, if you have previous experience with CO<sub>2</sub> extraction of your raw material, then we can send you a brief questionnaire on the basis of which we can quote a price range.

### **Can you handle the logistics?**

Yes. We are perfectly positioned to service the logistics via road transport with our partners across Europe as well as the rest of the world via the Black Sea and then the Bosphorus. We have an experienced logistics team that can organize the pick up of your raw material or the delivery of your extracts wherever you are.

### **What process-quality certifications do you have?**

We are FSSC22000, ISO 22716, ISO 14001, ISO 9001, Organic, REACH, Kosher and Halal certified. The respective documentation is available upon request.

### **Can you perform grinding of raw material?**

Yes. On site we operate hammer & shredder type mills with capacities of 1.5 MT/h and tunable particle size means ranging from 250 microns up to 5 mm.

### **Does CO<sub>2</sub> extraction remove the plant's natural flavor and aroma?**

CO<sub>2</sub> extraction is a gentle process that helps preserve the natural flavors and aromas originally contained in the raw materials. We can isolate essential compounds without damaging sensitive molecules, resulting in a pure and aromatic extract.