Organic Dried Fruits

MLB BIOTRADE

Freeze Dried Fruits

Traditionally produced fruit powders are Air Dried, we are focused on 100% natural Freeze Dried fruits powders, it means the water is dehydrated from frozen fruits not fresh ones. It allows to keep all the nutritional values within the product and remove only the pure water.

All our products are available in Organic Quality.

Freeze Dried Fruits can be raw products as the processing is not exceeding the 50C degrees.



What you can get from us?

Prompt deliveries and affordable MOQ

We are able to deliver our fruits exactly when you need them, we usually have the stock available for prompt shipment and if not, our lead time is within 14 days. We are able to deliver the goods with MOQ of 15kg – you can buy when you need it.

Predictable price and flexibility for your business.

Predictable price we set our price for the whole season so you can budget the price for your future orders without losing the flexibility of ordering just when you need it. We want to offer you certainty in growing your business.

Assured quality

For each batch of the product we are providing not only the COA but also the complete range of analysis reports which certifies superior quality of our product. You are free to use it as your marketing needs as well and also be assured what you are offering to your clients. Our quality is proven at each stage, we do believe in the certification and quality system but ultimately, we want you to have the proof the system works on a daily basis as it should.

Convenient packing

We are paying lots of attention to supply you the product with the superior quality. Therefore, our packing is no compromise as well. We deliver our powders in 7,5 kg bags which are well placed in one carton box holding 2 bags. It gives you the flexibility when repacking or using the products. The packing boxes are designed to fit well EURO pallets and storage space, so you do not lose valuable space.

Effective solution in convenient form.

Our portfolio of fruits is designed to let you offer you customers and partners effective fruit ingredient. It can be used as standalone product in the form of snacks or fruit powders for direct consumption. Alternatively, you can use them as food ingredient in the various product compositions. The whole fruits solution we are offering will enhance your product with the natural fruit aroma and taste. Freeze Dried fruits rehydrates extremely easily and quickly and are able to enrich the final customer experience with naturally colored shake or smoothie.

Our team of technologist is able to assist you and find the solution for your needs. Please contact us.





Fruit Powder Solutions

MLB Biotrade specializes in the Fruit Powder solutions and we have a good reason to claim our products to be superior in this form to most of the solution offered on the market. Here is why:

1. Highest quality of the raw material

Our fruit powders are produced from the whole fruits being freshly Freeze Dried – the same quality standards we set for the pieces of fruits are applied to the powders. We do process Class A fruits to provide superior experience and ultimate fruity flavor.

Our fruits are sourced in most cases locally from the farmers we know, it is important for us to have a personal relationship with growers as our company is growing also some of the fruits we process (see our plantations of Aronia berries). We know the fruits are coming quickly from the field to freezing company and afterwards we are getting the goods initially cleaned for our processing.

We pay a lot of attention to set the fair prices for the farmers and built the growth of our company based on the long-term relationships with the farmers cultivating the fruits responsibly and in accordance with the social standards.

2. Exceptional 99,9% powders purity

One of the biggest threats in the powders are the mineral and ferromagnetic impurities which can be easily overlook in the powder forms but can spoil the taste and the experience. As there are no legal requirements for the purity of the powder in the EU market, we have set the standards for our own. Practically there is no risk of health hazard of the foreign bodies after milling, but we believe it is not actually enough.

Our approach is based on 4 steps powder processing to achieve at least 99,9% level of purity.

Step 1: Freeze Dried Fruits input

Thanks to Freeze Drying technology the first cleaning is being done on the IQF processing which gives us as security we handling the raw material already cleaned and perfectly suitable for powdering. Comparing to Air Dried products based on our experience we are practically free from the pieces of sand or stones which can cause problems with ferromagnetic impurities at the later stages, especially milling itself.





Step 2: Proper milling equipment

Our mill is equipped with changeable sieves which are specially constructed to provide additional cutting abilities in order to make the milling as quick and gentle as possible. The less time spend in the mill means the less risk of contamination with stainless steel microparticles which can also affect the quality of the final product. Secondly it means less heating during the milling which keeps the Freeze Dried fruits freshness and keeps natural fruits sugars not harmed by the friction forces.

Step 3: Magnetic bars cleaning

The next step of providing the security is passing through 2-stage magnetic bars which are able to eliminate any ferromagnetic particles which were tight with the fruits and could have passed the previous steps but were freed after the milling process.

Step 4: Metal detection

In the final step just before the product gets into the bags we are verifying the previous steps has done their job well. Metal detection is done on the free flowing sensitive metal detector and goods are getting directly to bags which are weight and sealed immediately afterward.

3. The homogeneous structure of the particles in the powders

It is not less important to have the stable and homogenous structure of the fruits' powders in the final applications. What can be unnoticed during the direct consumption in the industrial application can cause a lot of troubles. Thanks to our milling and sieving combined system we are able to offer powders which are actually meeting your expectations in terms of mesh size and particle shapes. It is important to have the same quality of the powders which is giving the unique and proper feature to your final product. Let us guarantee it.

4. The controlled level of humidity strengthened by shortening the exposure to ambient environment

Our system of milling, sieving and packing is based in the humidity and temperature-controlled area. Thanks to that we are able to mill in clean and well controlled atmosphere very vulnerable raw materials which are Freeze Dried fruits. The prolonged exposure to humidity is causing the loss of crunchiness of the fruits and is main cause why the Freeze Dried fruit powders are getting clumping. We have spent years mastering the process of preparing the fruit powders and eliminate potential drawbacks. We have the solutions and are ready to share them with you.

Do you have your own raw material for processing please ask us for our services on the contract manufacturing basis.





Typical question about dried fruits.

Dried fruits are not healthy and must be preserved to keep its shelf lifetime.

You can hear a lot of bad things about dried fruits. It is absolutely crucial to understand the differences between the drying methods and final dehydrated products. The crucial for the quality is the method of drying. Freeze Drying is the superior method of drying allowing for preserving over 90% of nutritional values from the fresh fruits, therefore thanks to Freeze Dried technology you get the fruits available around the year, easy to store in ambient temperatures and stable for years.

Is it fair to say a small pack Freeze Dried fruits is equivalent to one portion of fresh fruits?

Yes, it is absolutely correct. We recommend the single dosage of Freeze Dried fruits or powders to be approx. 10grams. It is equivalent of 1 out of 5 recommended daily portions of fruits and vegetables.

What is the shelf lifetime of Freeze Dried fruits?

Freeze Dried fruits are dehydrated to the extend unachievable for other technologies, typical water content for the lyophilized fruits is approx. 1,5%. What is more important for the safe storage is AW value – Water Activity. In order to guarantee the safety of storing for the dehydrated fruits the values must be below 0,6 – the level preventing against worsening of the microbiology. Typical values of the Air Dried products are between 0,4-0,8 comparing to Freeze Dried products which can be reduced to 0,1-0,2. It means by Freeze Drying you are able to achieve full safety of the product with no additives or artificial preservatives or antioxidant.

Are Dehydrated fruits synthetically preserved to extend their life?

They can be but it is absolutely not necessary! Applying dehydration technology in the proper way it is absolutely not necessary to add external preservatives. It is basically the matter of the applied technology and time. We can assure you that there is no preservatives, artificial colors and no other additives. Properly done process of Freeze Drying can last up to 24 hours, therefore it is quite expensive one, but we believe the benefits of it greatly outweigh the costs.

Are Airdried Fruits always bad?

Not always, but it depends on the drying process mostly. Air Dried fruits can be a good dehydration method and more cost effective comparing to Freeze Drying. We strongly suggest to carefully check the manufacturing flowchart and product specification. We strongly advice to using the Air Dried fruits with no addition of preservatives (e.g. SO2) and sugar. Both additives aim is to prolong the shelf lifetime of the Dried Fruits and it is not necessarily good in our opinion. Properly dried fruits can stay stable for long periods without them. It is also important to note that typically Air Dried fruits are produced from the fresh ones therefore their availability

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through the year can be limited. What is more the loss of nutritional values in dried fruits is higher typically around 30% compared to fresh or Freeze Dried fruits which can be important differentiating factor for the most aware customers. If you need an affordable dried fruits solution, please ask us about our offer as well.

Processed fruits are losing the health benefits of the fresh fruits?

Not in this case. Freeze Dried fruits are processed as the whole fruits, we keep all what is included in the Fresh Fruits except of water. Vitamins, Fiber, Antioxidant benefits it all stays in the fruits after Freeze Drying. The scientific view about juices, especially those reconstituted from the concentrate is that they are not equivalent to the portion of fruit and unfortunately it may be true. The good news is that same believe is groundless for Freeze Dried fruits, which means you are getting the whole fruit as it is, juts except of the water.

My daily portion of fruits is a glass of fresh juice, I do have enough fruits in my diet.

By pressing the juices even on your own, you are losing lots of ingredients which are crucial to benefits of fruit consumption in the balanced diet. The crucial and the most important one is the natural balance between fiber and sugars naturally occurring in the fresh fruits. Up to 90% of fiber is removed during the juicing process, depending on the juicer. Some soluble fiber will remain, but the majority of insoluble fiber is removed and that is the problem. Naturally occurring sugars are absorbed way more quicker without the fiber therefore cause adverse impact on our body by increasing sugar blood level. It is important to understand that fruit juices are not the "free sugar" as the whole fruits. Why do not you try a smoothie made from our solution - Freeze Dried fruits powders?

What is dehydrated fruit? Are they all the same?

It is important to understand that drying can be done in many different methods which results in different quality of final products. Regular Air Drying with hot air is the most common method – fresh fruits are exposed to circulating high temperature air flow and water is evaporating. Typically, such product can be preserved with additions of synthetic preservatives of SO2. Hot air exposure leads to significant losses of nutritional values up to 30-40%. Its shape and taste experience is also far away from taste of the fresh fruits. On the other hand, this method is cheap, relatively simple and offer the basic need of dehydrated fruits.

Our products are Freeze Dried which is completely different technology particularly focused on preserving the nutritional values of the fruits and gentle dehydration. The whole process is done in the temperatures below 50C degrees therefore it is keeps the status of the raw product.

Superior microbiology and extremely low water content – what does it mean to me?

Freeze Dried Powder can find their application in clean and dry environment. Would you like to add some natural taste to the whey protein? It is absolutely not a problem using Freeze Dried fruits. Have you experienced the difficulties adding Air Dried Fruit powders to proteins, granola or other compositions? Probably the results were less than perfect as agglomeration or loss of crunchiness are common challenges. Should you need a solution for those problems please feel free to contact us.





How does drying affects the environment and climate changes?

We believe that our approach to serve fruits is way more effective for the environment than consumption of fresh fruits distributed through modern retails chains. There few reasons for it:

- 1. Much smaller losses of the produced and not consumed fruits up to 30% produced food is wasted
- 2. Significantly lower carbon doioxide emission due to ambient storage and logistics during the supply chain.
- 3. During drying we basically need to provide the same energy as during the freezing process. Afterwards there is no other energy consumption needed.

To make it clear we love the fresh fruits as much as you, but it seems a bit strange to use consuming fresh seasonal fruits during the winter holidays. We just want to let you enjoy the fruit experience around the year. Freeze Drying is our best answer to this dilemma.

Why Freeze Dried fruits are so expensive compared to the fresh fruits?

We agree when you compare the fruits during the harvesting season and abundance of fresh fruits is available. Our aim is to offer you similar experience around the year. Taking into account this Freeze Dried fruits can be a great alternative off-the season. Just let us see how it works:

Fresh Strawberries^{*} 250g can cost off the season in the supermarket approx. 2,5EUR, 250g of Blueberries is the approx. 2EUR per package, 250g of Raspberries would be approx. 3EUR. Let us take into account dehydration factor which can be up to 10 times. (Having 100g of Freeze Dried Strawberries is equivalent to 1kg of fresh ones!). We are sure that you can find the portion of Freeze Dried Fruits snacks at only slightly higher price. We believe it is great price for the convenience the Freeze Dried snacks and powders can offer.

*We are referring here to conventional grade product.

