



Nutrisan Biotech



Introduction

Hangzhou Nutrisan Biotech Co. Ltd, was established in 2018 as a subsidiary company of Zhejiang Shengshi Bio-technology Co. Ltd for exporting the botanicals extracts outside the China Domestic market.

Zhejiang Shengshi was founded in 1998 by Mr Hu Linfu that developed the botanicals extract production in the China for the domestic market, the factory is located in the beautiful Kanghan industrial Park in the Zhejiang Province. The factory has a headcount of 200 people and has reached 25 million USD in China domestic sales.

Today Nutrisan exports the botanicals extract to Europe, United States and South America, with the partnership with Chr Olesen Group, reaching more than 10 million USD in sales in less than 3 years.

**Quality and production certifications:
FSSC22000
FAMI-QS
Kosher and Hallal**

Origin Makes the Difference

The quality of the raw materials is the essential prerequisite, as it will affect all the subsequent phases. We perform a strict selection of cultivated and wild harvested raw materials in compliance with guidelines of GACP for starting materials from inspected and qualified approved suppliers controlling the crop areas, harvesting period and correct drying and storage conditions.

Once the selected raw materials arrive at our factory are stored in optimal conditions in our different warehouses to preserve the integrity of the active constituents. We test our raw materials exhaustively, in accordance with international regulations and pharmacopoeias encompassing including TLC or DNA coding, pesticides, pollutants, microbiology, aflatoxins and active substance analysis.

Manufacturing process

The whole production process is in strict adherence to GMPs with well defined procedures and analysis at critical steps of production. All raw data are recorded, and every critical procedure and parameter are thoroughly described for workers and double checked in every batch record. Working with 3rd party CNAS labs. Qualified analytical reference standards are used, and all data are summarized in the Certificate of Analysis. We keep all the primary data to be able to trace every batch if needed. The final stage involves quality assurance, control review including batch record review, Analytical controls (content of active principles, impurities, heavy metals, pesticides, residual solvents, etc.), Physical analysis and Microbiological analysis.

Versatile and efficient Industrial capabilities

Current production capacity is more than 7.000 metric ton per year of raw materials for the natural ingredients full offering, that include not only the Natural Botanicals Healthy Extracts, but also the sugar replacers and other nutrients all plant-based origin.

The factory is equipped with different production techniques such as:

- Solvents continuous extraction line 8 metric tons a day processing capacity.
- Water continuous extraction 10 metric tons per day.
- 55.000 litres capacity in tanks.
- 4 extraction tanks of 4.000 litres each
- 3 extraction tanks of 3.000 litres each
- 1 Continuous extraction equipment by water that can produce 10 mt per day
- 1 extraction in continue equipment by ethanol that can produce 8 mt per days
- 8 evaporator that can produce 1500 litres per day each
- 40 columns that can produce 1500 litres per each
- 11 Vacuum drier that can produce 400 kg per day each
- 5 Spray dryer that produce 1500 kg per day each
- 2 Freeze dryer that produce 600 kgs per day each

Factory produce according to different pharmacopeia's, such as European, US or Chinese, each ingredient is manufactured not only according to Good Manufacturing Practices, but on technical requirements of EP, USP or CP, such as selection of the right and active part of the plant, minimum contents of active substances, and quality and safety criteria, such as expression of results (HPLC / UV / GC), pollutants and pesticides authorized levels, microbiological compliance, and adaptability to other parameters such as tap density, solubility required on the application, and in most of the products, avoiding the use of excipients for a cleaner labelling of the final products where our ingredients are used.

Tailored products

Factory Research and Development department has a wide experience in botanicals extracts and then we can produce tailor made botanicals extract based on customer request by using a different part of the plant (root-leaves-stems-fruits) our using different extraction solvents (water, ethanol/water), particle size or tap density.

Different characteristics of tailored produces are enhanced solubility range or tailored nutrients and actives substances profile.

This is an upgrade service since all our baseline range of botanicals are Non-Genetically modified, Allergen Free, Non irradiated, Etc. Normal packaging is in 25 kg drums, but we can do other packing on customer request. All botanicals productions are Kosher and Halal certified.

Market Intelligence

Part of our responsibility in the whole supply chain is not only to advice our customers on the requirements of the pharmacopeias or regulatory ones, but also on the key points affecting the price, the current and future offer demand balance and other market insights affecting all our ingredients from the seeds to the consumer needs. We provide market dynamics information to our clients for both them and us to be aware on the status of the offer and the demand, and together, take the better decisions for the supply assurance and competitiveness in the market.

Our focus is to partner with long term aligned with our values and offering B2B companies looking forward for a profitable mutual win-win strategy and growth in the market of the botanical's ingredients.

Applications

Our ingredients can be used both in the Food Supplements and Food and Beverages markets, in compliance with EU-USA-LATAM requirements too, depending on each product and application (tablet-capsules-gummies-sachets-sticks-ampoules-beverages-food stuffs- nutritional products-pouches-shots-cans).

Our sales and product specialist team will advise on each particular case you are facing, to provide you a real solution.



Product portfolio

Our product range is divided in the bellow main categories and are adapted to each client market-consumer local needs, in a safe, high quality, transparent and reliable supply business model

Botanical and Fruits extract

Plant based Nutrients

Natural Sweeteners and flavoring agents

Botanicals and Fruit Extracts



The wider portfolio is driven by the botanical and fruit natural healthy extracts, with a range of more than 50 products based on 35 plants or fruits. One of our major strengths are the Panax Ginseng extracts (offering a full offering: white-red, root-leaf, HPLC-UV, different solubilities, density, or active substances profile), Natural Vitamin C from prickly pear and Green Tea extracts.

In addition to the Traditional medicine uses, we have a further full dossier on each botanical with the recommended daily effective and safety dose according to official and reliable authorities (European Medicines Agency, ESCOP), technical and scientific information and market insights.

All our botanical extracts have a double assay: ratio and active substance by HPLC-UV-GC:

- The native ratio is the number of Kg of plant needed to make 1 Kg of botanical extract. This in general means that the higher ratio, the more concentration levels of active substance will be achieved; but raw materials might vary their active substance natural occurring assay due to climate factors, harvesting methods, industrial yield factors, so, it is not an efficient assay of the extracts, only a indicator.
- The active substance percentage. This will standardize every year crop issues, industrial yields or variability of raw materials used to produce the botanical extracts. In addition, the method of analysis is also a key indicator of the real assay of the substance, as under HPLC will have a different value than by UV. In fact, in many of our botanicals, we express both methods assay (HPLC & UV).

In addition, external accredited laboratories are used to analyze periodically the full compliance of our botanicals with the target regulations and client's needs.



Product name	Code	Latin name	Spec	Ratio	Extraction Solvents	Excipients	Origin of growth	Botanical part
Apple Extract	MP01-80P	Malus pumila	80% Polyphenols / 4% Procyanidin B2	200:1	Ethanol/water	None	China	Fruit Skin
Bamboo leaf Extract	PM01-24F	Phyllostachys meyeri	24% Flavones	50:1	Ethanol/water	None	China	Leaf
Bilberry Extract	VM01-10HPLC	Vaccinium myrtillus	10% Anthocyanins HPLC	45:1	Ethanol/water	Maltodextrin	North Europe	Fruit
Bilberry Extract	VM01-25UV	Vaccinium myrtillus	25% Anthocyanidins UV	85:1	Ethanol/water	None	North Europe	Fruit
Bilberry Extract	VM01-25HPLC	Vaccinium myrtillus	25% Anthocyanins HPLC	65:1	Ethanol/water	None	North Europe	Fruit
Black Garlic Extract	AS02-1000SAC	Allium Sativum L.	1.000 ppm SAC (S-allyl-L-cystein)	40:1	Water	None	China	Bulb
Echinacea purpurea Extract	EP01-04HPLC	Echinacea purpurea	4% Polyphenols HPLC	6:1	Ethanol/water	None	China	Root
Eleuthero (Siberian Ginseng) Extract	ES01-008HPLC	Eleutherococcus senticosus	0.8% Eleutherosides B+E	15:1	Ethanol/water	Maltodextrin	Russia	Root
Ginger Powder	ZO001ST	Zingiber officinale	Steam Treated	1:1	None	None	China	Root
Ginkgo biloba Extract	GB01-EP	Ginkgo biloba	24% Flavone Glycosides /6% Terpene lactones <5 ppm Ginkgolic acid EP	50:1	Ethanol/water	None	China	Leaf
Ginkgo biloba Extract	GB01-USP	Ginkgo biloba	24% Flavone Glycosides /6% Terpene lactones <5 ppm Ginkgolic acid USP	50:1	Ethanol/water	None	China	Leaf
Grape Seed Extract	VV01-OPC70	Vitis Vinifera	70% Oligomeric proanthocyanidins	15-17:1	Ethanol/water	None	France	Seed
Green tea Extract	CS01-30P	Camellia sinensis	30% Polyphenols 15% Catechins 4% Caffeine	5:1	Water 100% purified	None	China	Leaf
Green tea Extract	CS01W-30P	Camellia sinensis	30% Polyphenols 15% Catechins 6% EGCG	5:1	Water 100% purified	None	China	Leaf
Green tea Extract	CS01-45P	Camellia sinensis	45% Polyphenols 15% Catechins <5% Caffeine	5:1	Ethanol/water	None	China	Leaf
Green tea Extract	CS01W-50P	Camellia sinensis	50% Polyphenols 20% Catechins 10% EGCG	10:1	Water 100% purified	None	China	Leaf
Green tea Extract	CS01-80P	Camellia sinensis	80% Polyphenols 75% Catechins 40% EGCG <10% Caffeine	12:1	Ethyl Acetate	None	China	Leaf
Green tea Extract	CS01-98P	Camellia sinensis	98% Polyphenols / 75% Catechins / 50% EGCG <1% Caffeine	15:1	Ethyl Acetate / water	None	China	Leaf
Green tea Extract	CS01-98P2	Camellia sinensis	98% Polyphenols / 75% Catechins / 50% EGCG <1% Caffeine (Solid dosage)	15:1	Ethyl Acetate / water	None	China	Leaf
Horse chestnut Extract	AH01-98	Aesculus hippocastanum	98% Total Saponins 80% Acscin IA + IB	30:1	Ethanol/water	None	China / India	Fruit
Horsetail Extract	EA01-07UV	Equisetum arvense	7% Silica UV	6:1	Ethanol/water	Maltodextrin	China	Aerial part
Jamaica Quassia Extract	PE01-53HPLC	Picrasma excelsa	53% Quassin and Neoquassin HPLC	300:1	Ethanol/water	None	China	Wood
Magnolia Bark	MO01-80HPLC	Magnolia Officinalis	80% Magnolol + Honokiol	70:1	Ethanol/water	None	China	Stem bark
Marigold Extract	CO01-50HPLC	Calendula officinalis	50% Lutein	N/A	N-hexane	Maltodextrin	China	Flower
Milk thistle Extract	SM01-70HPLC	Silybum marianum	70% Silymarin (28-45.5% Silybin A&B, 7-14% Isosilybin A&B, 14-31.5% Silydianin & silychristin)	45:1	Acetone	None	China	Seed
Milk thistle Extract	SM01-08UV	Silybum marianum	8% UV Silimarin ratio 4:1	5:1	Ethanol/water	Maltodextrin	China	Seed

Product name	Code	Latin name	Spec	Ratio	Extraction Solvents	Excipients	Origin of growth	Botanical part
Milk thistle Extract	SM01-80UV	Silybum marianum	80% Silymarin UV 50% HPLC	30:1	Ethanol/water	None	China	Seed
Milk thistle Extract	SM01E-80UV	Silybum marianum	80% Silymarin UV 50% HPLC	30:1	Ethyl acetate / Water	None	China	Seed
Mulberry Extract	MA01-05HPLC	Morus alba	50% DNJ (1-Deoxyojirimycin)	40:1	Ethanol/water	None	China	Leaf
Natural Vitamin C	RR-60Vc	Rosa roxburghii	60% Vitamin C	50:1	Ethanol/water	None	China	Fruit
Olive leaf Extract	OE01-20HPLC	Olea europaea L	20% Hydroxytyrosol	60:1	Ethanol/water	Maltodextrin	China	Leaf
Olive leaf Extract	OE02-20HPLC	Olea europaea L	20% Oleuropein	9:1	Ethanol/water	Maltodextrin	China	Leaf
Polygonum Extract	PC01-95HPLC	Polygonum cuspidatum	95% Resveratrol	100:1	Ethanol/water	None	China	Root
Pomegranate Extract	PG05-40HPLC	Punica granatum	40% Punicalagins	20:1	Ethanol/water	None	China	Fruit peel
Red Ginseng Extract	PG02-20HPLC	Panax ginseng	20% Ginsenosides HPLC 36% Saponins as Rg1	12:1	Ethanol/water	None	China	Root
Sea Buckthorn Extract	HR01-05J	Hippophae rhamnoides	5:1 juice powder	5:1	Water	None	China	Fruit
Sea Buckthorn Extract	HR01-Oil	Hippophae rhamnoides	Fruit Oil 25-35% Hexadecanoic acid, 25-35 Cis-9-octadecenoic acid, 25-35% Cis-9-hexadecenoic acid, 1-5% Cis-9, 12 octadecadienoic acid,	20:1	Water	None	China	Fruit
Sophorae Japonica Extract	SJ01-95R	Sophorae Japonica	95% Rutin	15:1	Ethanol/water	None	China	Flower
Tea Tree Seed Oil	CO01-Oil	Camellia oleifera Abel.	3.9-14.5% Hexadecanoic acid, 74-87% Cis-9-octadecenoic acid, 7-14% Cis-9, 12 octadecadienoic acid, <1.4% Cis-9, 12, 15-octadecatrienoic acid	18:1	Water	None	China	Seed
Turmeric Extract	CL01-95HPLC	Curcuma longa	95% Curcuminoids HPLC	35:1	Ethyl Acetate / water	None	India	Root
Turmeric Powder	CL001ST	Curcuma longa	Steam Treated	1:1	Water	None	India	Root
Valerian Extract	VO01-0301	Valerian Officinalis	Valerinic Acid 0.42% by HPLC	3:1	Ethanol / wáter	Maltodextrin	China	Root
White ginseng Extract	PG01-10HPLC	Panax ginseng	10% Ginsenosides HPLC	7:1	Ethanol/water	Maltodextrin	China	Root
White ginseng Extract	PG01-14HPLC	Panax ginseng	14% Ginsenosides HPLC	9:1	Ethanol/water	Maltodextrin	China	Root
White ginseng Extract	PG01-20HPLC	Panax ginseng	20% Ginsenosides HPLC	12:1	Ethanol/water	None	China	Root
White ginseng Extract	PG0103-20HPLC	Panax ginseng	20% Ginsenosides HPLC	18:1	Ethanol/water	None	China	50% Root & 50% stem
White ginseng Extract	PG0103-20 UV	Panax ginseng	20% Ginsenosides UV 12% HPLC	11:1	Ethanol/water	Maltodextrin	China	50% Root & 50% stem
White ginseng Extract	PG01-20 UV	Panax ginseng	20% Ginsenosides UV 14% HPLC	9:1	Ethanol/water	Maltodextrin	China	Root
White ginseng Extract	PG01-04HPLC	Panax ginseng	4% Ginsenosides HPLC	3:1	Ethanol/water	Maltodextrin	China	Root
White ginseng Extract	PG01-05HPLC	Panax ginseng	4.5% Ginsenosides HPLC, <10ppb Quintozene	3:2	Ethanol/water	Maltodextrin	China	Root
White ginseng Extract	PG03-40HPLC	Panax ginseng	40% Ginsenosides HPLC	15:1	Ethanol/water	None	China	Leaf

Natural Sweeteners, preservatives and flavoring agents

We are offering natural like Stevia Extracts (both enzymatic E-960c and solvents extracted E-960a) but also some other extracts that depending the legislation in every country can be used as sweeteners or flavoring agents.

Product name	Code	Latin name	Spec	Ratio	Extraction Solvents	Origin of growth	Botanical part
Licorice Extract	MAG-95UV	Glycyrrhiza uralensis	95% Mono Ammonium Glycyrrhizinate		Water	China / Northwest Asia	Fruit Skin
Licorice Extract	GU01-98UV	Glycyrrhiza uralensis	98% Glycyrrhizic acid A UV	100:1	Water	China / Northwest Asia	Leaf
Luo Han Guo Extract	MG01-40HPLC	Momordica grosvenori	40% Mogroside V	120:1	Ethanol/ water	China	Fruit
Rosemary	R002-06HPLC	Rosmarinus officinalis	6% Rosmarinic acid HPLC	5:1	Ethanol / Water	China	Leaf
Rosemary	R001CA-10HPLC	Rosmarinus officinalis	10% Carnosic acid HPLC	6:1	Ethanol / Water	China	Leaf
Rosemary	R001-20HPLC	Rosmarinus officinalis	20% Carnosic acid HPLC	10:1	Ethanol / Water	China	Leaf
Rosemary	R001-25HPLC	Rosmarinus officinalis	25% Carnosic acid HPLC	10:	Ethanol / Water	China	Leaf
Stevia Extract	SR060RA	Stevia rebaudiana	95% Steviol Glycosides 60% Reb-A	12:1	Ethanol/ water	China	Fruit
Stevia Extract	SR080RA	Stevia rebaudiana	98% Steviol Glycosides 80% Reb-A		Ethanol/ water	China	Fruit
Stevia Extract	SR095RA	Stevia rebaudiana	98% Steviol Glycosides 95% Reb-A	12:1	Ethanol/ water	China	Bulb
Stevia Extract	SR060RA	Stevia rebaudiana	98% Steviol Glycosides 98% Reb-A	35:1	Ethanol/ water	China	Root
Stevia Extract Enzyme treated	ETSTE01	Stevia rebaudiana	95% Glucosyl Stevioside <5% Reb-A+Steviol Glycoside	-	Ethanol/ water	China	Root



Plant based Nutrients

For sports nutrition, precursors production or healthy products, we offer a plant based nutrients range as follows:

Product name	Code	Latin name	Spec	Ratio	Extraction Solvents	Origin of growth	Botanical part
Berberine HCL	BA01-95HPLC	Berberis aristata	95% Berberine HCL		China	China	Fruit Skin
Green tea Extract	CS01-20L	Camellia sinensis	20% L-Theanine	30:1	China	China	Leaf
NMN	NMN-98	β -Nicotinamide Mononucleotide	98% NMN		China	North Europe	Fruit
Shikimic acid	IV01-98HPLC	Illicium verum Hook	98% Shikimic acid		China / Southeast Asia	North Europe	Fruit



NATURAL BOTANICAL HEALTHY EXTRACTS



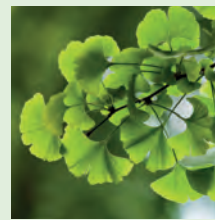
Rhodiola Rosea



Green Tea



Horsetail



Ginkgo Biloba



Polygonum
*Resveratrol



Bamboo Leaf



Horse Chestnut



Milk Thistle



Olive Leaf



Magnolia Bark



Panax Ginseng



Echinacea



Marigold

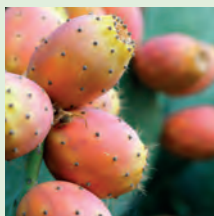


Turmeric

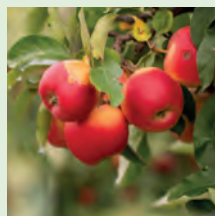


Sea Buckthorn

NATURAL FRUIT HEALTHY EXTRACTS



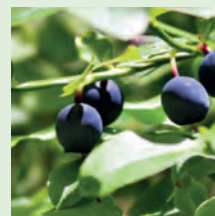
Natural Vit-C
Prickly Pear



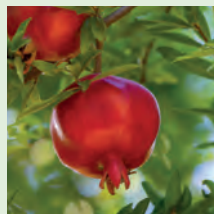
Apple



Mulberry



Bilberry



Pomegranate



Grapeseed

HIS (HIGH INTENSE SWEETENERS)



Stevia



Monk Fruit



Licorice

NUTRIENTS



Berberine
(Hydrastis canadensis L)



Shikimic acid
(Illicium verum Hook)

Health areas

We cover almost all health areas where the botanicals extracts have a traditional use, as described in the HEALTH AREAS:

HEALTH AREAS	Anti-Inflammatory	Antioxidant	Bone & Joint	Cardiovascular	Cognitive	Diabetes	Digestive
Apple		o		o			
Bamboo		o		o			
Bilberry							o
Black Garlic				o			
Echinacea	o	o					
Eleuthero					o		
Ginger	o				o		o
Ginkgo	o			o	o		
Grape Seed	o	o					
Green Tea	o	o					
Horse Chestnut	o			o			
Horsetail			o				
Jamaica Quassia							
Magnolia Bark							o
Marigold		o					
Milk Thistle	o	o		o			
Mulberry	o	o		o		o	
Natural Vitamin C	o	o	o	o	o		
Olive leaf	o	o		o			
Polygonum	o	o		o	o		
Pomegranate	o	o		o		o	
Red Ginseng		o		o	o	o	
Rhodiola rosea	o	o					
Sea Buckthorn	o			o			
Sophorae Japonica	o			o		o	
Tea Tree Seed Oil							
Turmeric	o	o		o			o
White ginseng		o		o	o	o	
Berberine HCL				o		o	
L-Theanine	o	o					
NMN				o			
Shikimic acid							
Licorice						o	
Luo Han Guo						o	
Stevia						o	

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