

[.....]

Wild Flora and Fauna (CITES)):

☐ Not applicable

BOTANICA	AL PREPARATIONS QUESTIONNAIRE
IDENTIFIC	ATION
- Ma	anufacturer:
	[]
- Dis	stributor/Sales representative:
	[]
- Bo	tanical preparation commercial name:
	[]
1. INFORMA	TION RELATING TO THE PLANT
1.1. Plant r	name
1.1.1.	Scientific name (Latin name, family, genus). Variety and chemotype where necessary:
	[]
	Common (vernacular) name:
	[]
1.1.2.	Risk of adulteration:
	□ No
	□ Yes
	[Specify if a risk of adulteration exist with other species of the same genus or other genus of the same family or other plants containing for instance similar active constituents or other plant parts (for instance use of the leaf, partially or completely, instead of the root]
1.1.3.	Cultivated or wild variety:
	☐ Cultivated
	□ Wild
1.2. Place	of harvesting / collection
1.2.1.0	Country / Region (Specify country and if possible region):
	[]
1.2.2.9	pecific authorisations (e.g. licences, official authorisations, etc):

1.2.3. Where applicable, information relating Regulation 338/97 on the protection of species of wild fauna and flora (or to the Convention on International Trades in Endangered Species of



☐ Applicable					
[Specify:]					
1.3. Method of harvesting / c	ollection:				
☐ Manual					
☐ Mechanical					
1.4. Period of harvesting / col	llection:				
[Specify the month		ring which harvest	ing /collection t	ook place]	
1.5. Stage of harvesting / coll	ection:				
[indicate the stage	of plant grow	th at the time of h	arvesting / colle	ction]	
1.6. Process used for drying:					
[Specify: (e.g. exter	nal, internal, c	open air, drying wi	th gas, fuel, woo	od, etc)]	
1.7. Treatments (e.g. phytosa	nitary) appli	ed:			
- Before harvesting / c					
□ No					
☐ Yes					
[Specify:]					
- After harvesting / co	llection:				
□No					
☐ Yes					
[Specify:]					
GACP form (Good Agricultu Document):	ral and Col	lection Practic	e - For exan	nple: EUROPAM	Batch
☐ Not available					
☐ Available					
(Attach the docume	nt)				
2. PLANT PART OR PRODUCT US	SED				
☐ Aerial part	☐ Fruit	☐ Flower	□ Seed	☐ Leaf	
	□ Bark □ Other	☐ Exudate			
[Specify: (e.g. flower	ing tops, juice,	buds, etc)]			
☐ Underground part	□ Root	☐ Rhizome	□ Bulb		

3.



¹ Definition of Botanical preparation: All preparations obtained from botanicals by various processes (e.g. pressing, squeezing, extraction, fractionation, distillation, concentration, drying up and fermentation). These include comminuted or powdered herbal substances, tinctures, extracts, essential oils, expressed juices and processed exudates.



[Specify:]

- Ratio dried plant / final extract3:

[Specify:]

Attach a flow chart describing the ingredients manufacturing process, including In Process Controls $(IPC)^4$

3.4. Country / Region:

[Specify the country, region or manufacturing plant where the manufacturing or extraction took place (and not the location where the product was repacked, diluted or labelled).

Where relevant, attach a certificate of origin]

3.5. Full **composition**⁵ of the preparation (including additives⁶ and other food ingredients)

Ingredient	Theoretical %	Type and function

² The native extract ratio corresponds to the ration between the quantity of the plant and the extract yield from the extraction / transformation (before addition of any compounds, such as technological additives, carriers or dilution matrix)

- to visualise the raw materials used plant, solvents, additives or other substances), the main steps in the manufacturing and the controls that are implemented during manufacturing to verify that the process is applied in a correct way.
- to verify the conformity of the solvents used (Directive 2009/32, and where appropriate European pharmacopeia 2.4.24 (Method) or 5.4 (Limits))
- to verify the conformity of the described processes (purification steps or elimination of hazardous compounds or use of non traditional extraction techniques). The processes and extraction solvents considered as traditional are usually included in Pharmacopeia monographs. These include for example maceration, infusion, lixiviation, percolation, decoction, etc.

³ The final extract ratio corresponds to the ratio between the plant and the extract as commercialised (with technological additives and other food ingredients added)

⁴ The Flow Chart must enable

⁵ Specify the full composition (quantity of native extract, additives, bulking agents, etc), the levels in the product as well as their function. The product specifications file must indicate the composition.

⁶ Additives in the sense of food law includes carriers



Contaminants and residues of the preparation ⁷ Contaminants and Residues		Control					Reference, method	
		Pla	ant	Prepa	ration	Level / Limit	of analysis, Accreditation	
		Lot	Plan	Lot	Plan		(external/internal)	
t° a⊒								
Residual Solvent ⁸								
æκ								
₆ S	Pb							
meta	Cd							
Heavy metals ⁹	Hg							
Ĭ	Others (e.g As)							
o ≅ 3	Total plate count							

⁷ Specify where applicable if control is performed on the plant or on the preparation and if control is applied on lot basis or according to a control plan.

Where applicable, as a result of analysis of the botanical raw material used for production and in view of the production process, tests for microbiological quality, contaminants and residues in the botanical preparation may / may not/ be necessary.

It is not needed to tick a box if it is not applicable.

When certain residues or contaminants are subject to a periodic monitoring, the control plan must be attached.

 $^{^8}$ Solvent residues (except for aqueous extracts) in accordance with Directive 2009/32 and, where appropriate, European Pharmacopeia 2.4.24 (Methods) - 5.4 (limits).

⁹ Reference texts: Regulation 1881/2006 and Regulation 629/2008 and European Pharmacopeia: 2. 4. 27 (methods) + monograph 1433 « herbal drugs » (limits).

In addition to Lead, Cadmium and Mercury, other compounds usually tested (iodine, arsenic, ...) can also be indicated, where relevant or legally required.

¹⁰ Reference texts: European Pharmacopeia 5.1.8 B and C (limits) – European Pharmacopeia 2.6.12 and 2.6.31 (methods).

Indicate the specifications and the methods of analysis. If internal methods are used, specify if the methods are validated.



Yeasts and moulds				
Enterobacteriaceae (Bile-tolerant gram- negative bacteria)				
Escherichia coli				
Salmonella spp				
Others (e.g. Staphylococccus aureus, Pseudomonas eruginosa,)				
Pesticides ¹¹				
Mycotoxins (e.g. Aflatoxins B1, B2, G1, G2, Ochratoxin A) ¹²				
Polycyclic Aromatic Hydrocarbons (PAHs) ¹³			••••	
3-MCPD (3-monochloro- propanol-1,2-diol) ¹⁴			••••	
Nitrate ¹⁵				
Dioxins and PCBs (Polychlorobiphenyls) ¹⁶				
Melamine and other structural analogues ¹⁷				
Radioactivity (if relevant)				

Attach the control plan where appropriate

3.6. Genetical modification

¹¹ Reference texts: European Commission database + Regulation 396/2005 for Maximum Residue Limits (MRL) (http://ec.europa.eu/sanco_pesticides/public/index.cfm) or where relevant: European Pharmacopeia 2.8.13. Specify Under "Type "the reference applied (Regulation 396/2005, Ph. Eur., etc.) and under "accreditation "if the laboratory performing the analysis is accredited.

¹² Reference texts: Regulation 1881/2006, specifying maximum limits for aflatoxine B1, total aflatoxins, ochratoxin A, patulin, zearalenone, fumonisins and toxins for a number of food. These limits take into consideration the level of contamination generally observed. European Pharmacopeia 2.8.18 (aflatoxine B1) and 2.8.22 (ochratoxine A).

¹³ PAH/benzopyrene. Reference text: Regulation 1881/2006.

¹⁴ Reference text: Regulation 1881/2006

¹⁵ Reference text: Regulation 1881/2006

¹⁶ Reference text: Regulation 1881/2006

¹⁷ Reference text: Regulation 1881/2006 + the EFSA opinion on melamine in food and feed. EFSA Journal 2010; 8(4):1573, http://www.efsa.europa.eu/de/efsajournal/doc/1573.pdf



□ No	
☐ Yes	
[Specify]	
- One or more components have undergone another treatment ²⁰ :	
_	
□ No	
□ No □ Yes	
☐ Yes	
☐ Yes [Specify]	
☐ Yes [Specify] 3.8. Presence of allergens (from raw materials or processing aids) ²¹ :	

The information can be included directly in the questionnaire and an additional certificate is not necessary, given the signature to comply.

It is noted that in accordance with Regulation 1830/2003 products consisting of or containing GMOs must contain the following statement on the label: 'This product contains genetically modified organisms' or 'This product contains genetically modified [name of organism(s)]'

The information can be included directly in the questionnaire and an additional certificate is not necessary given the signature to comply.

It is noted that in accordance with Directive 1999/2 Ingredients treated with ionising radiation shall be indicated in the list of ingredients accompanied by the words 'irradiated' or 'treated with ionising radiation.

The information can be included directly in the questionnaire and an additional certificate is not necessary given the signature to comply

It is noted that it is obligatory to mention the presence of any ingredient or processing aid containing or derived from a substance or product listed in Annex II of Directive 1169/2011 used in the manufacture or preparation of a food and still present in the finished product, even if in an altered form. The name of the substance or product as listed in Annex II shall be emphasised through a typeset that clearly distinguishes it from the rest of the list of ingredients, for example by means of the font, style or background colour

The information can be completed by e.g. specifying the total absence in the manufacturing plant.

¹⁸ Reference texts: Regulation 1829/2003 and Regulation 1830/2003.

¹⁹ Reference texts: Directive 1999/2 and Directive 1999/3.

²⁰ e.g. fumigation by ethylene oxide or other fumigants such as phosphine or methyl bromide performed outside EU in 3rd countries

²¹ Reference text: Regulation 1169/2011.



	Cereals containing gluten, namely: wheat, rye, barley, oats, spelt, kamut or their hybridised strains, and products thereof, except wheat based glucose syrups including dextrose *, wheat based maltodextrins *, glucose syrups based on barley, and cereals used for making alcoholic distillates including ethyl alcohol of agricultural origin. * And the products thereof, in so far as the process that they have undergone is not likely to increase the level of allergenicity assessed by EFSA for the relevant product from which they originated	□ Yes	□No
	Crustaceans and products thereof	☐ Yes	□ No
	Eggs and products thereof	☐ Yes	□ No
	Fish and products thereof , except fish gelatine used as carrier for vitamin or carotenoid preparations, and fish gelatine or Isinglass used as fining agent in beer and wine	☐ Yes	□ No
	Peanuts and products thereof	☐ Yes	□ No
	Soybeans and products thereof , except fully refined soybean oil and fat *, natural mixed tocopherols (E306), natural D-alpha tocopherol, natural D-alpha tocopherol acetate, and natural D-alpha tocopherol succinate from soybean sources, vegetable oils derived phytosterols and phytosterol esters from soybean sources, and plant stanol ester produced from vegetable oil sterols from soybean sources	□ Yes	□No
	Milk and products thereof (including lactose), except whey used for making alcoholic distillates including ethyl alcohol of agricultural origin and lactitol	☐ Yes	□ No
	Nuts and products thereof, namely: almonds (Amygdalus communis L.), hazelnuts (Corylus avellana), walnuts (Juglans regia), cashews (Anacardium occidentale), pecan nuts (Carya illinoinensis (Wangenh.) K. Koch), Brazil nuts (Bertholletia excelsa), pistachio nuts (Pistacia vera), macadamia or Queensland nuts (Macadamia ternifolia),, except nuts used for making alcoholic distillates including ethyl alcohol of agricultural origin	□ Yes	□ No
	Celery and products thereof	☐ Yes	□No
	Mustard and products thereof	☐ Yes	□No
	Sesame seeds and products thereof	☐ Yes	□No
	Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre in terms of the total SO_2	☐ Yes	□ No
	Lupin and products thereof	☐ Yes	□ No
	Molluscs and products thereof	☐ Yes	□ No
3.9). Nanomaterials		
	- One or more components are present in the form of engineered nano	materials:	22
	□ No		
	□ Yes		
	[Specify]		

²² Article 2.2(t) of Regulation 1169/2011 defines 'engineered nanomaterial' as « any intentionally produced material that has one or more dimensions of the order of 100 nm or less or that is composed of discrete functional parts, either internally or at the surface, many of which have one or more dimensions of the order of 100 nm or less, including structures, agglomerates or aggregates, which may have a size above the order of 100 nm but retain properties that are characteristic of the nanoscale. Properties that are characteristic of the nanoscale include:

⁽i) Those related to the large specific surface area of the materials considered; and/or

⁽ii) Specific physico-chemical properties that are different from those of the non-nanoform of the same material » It is noted that all ingredients present in the form of engineered nanomaterials shall be clearly indicated in the list of ingredients. The names of such ingredients shall be followed by the word 'nano' in brackets.



3.10. Purity criteria of the additives (including carriers)

Additive		Covered by Reg 231/2012		Conform with Regulation 231/2012	
		☐ Yes	□ No	☐ Yes	□ No
		☐ Yes	□ No	☐ Yes	□ No
		☐ Yes	□ No	☐ Yes	□ No

4. ANALYTICAL DATA OF THE BOTANICAL PREPARATION

Attach the product specifications file (PSF)²³

-	Monograph:	☐ Internal
		[Specify]
		☐ Official
		[Specify]

4.1. Physico-chemical characterisation: data from the PSF

4.1.1. Organoleptic properties (appearance, odor, color, ...):

[Specify the analyses performed]

4.1.2.Identity (TLC, HPLC,):

[Specify the analyses performed]

Reference document: Annex I (heading: substances requiring monitoring, restrictions...), Where relevant, consult the EFSA compendium of botanicals reported to contain naturally occurring substances of possible concern for human health when used in food and food supplements. EFSA Journal 2012;10(5):2663.

http://www.efsa.europa.eu/en/efsajournal/doc/2663.pdf

The absence of quantification of a substance must be justified. Technical arguments or arguments based on bibliographic references can be sufficient.

Analytical results must confirm the values of the specifications files and be available for each of the lots supplied. It must be specified if the preparations has been subject of an official or internal monograph and the reference must be provided.

²³ The product specifications of the supplier of a botanical preparation must at least contain the following information:

⁻ Name of the preparation

⁻ Scientific name of the plant and plant part or product used.

⁻ Description: extraction solvent and titre (with specification of the extraction method), ratio P/native extract, composition (Types and levels of additives present)

⁻ Organoleptic characterisation: appearance, odor, color identification (TLC, HPLC, ...)*

⁻ Tests *

⁻ Loss on drying, total ash, dry residue, viscosity, turbidity, etc

⁻ Assay: markers * / Reference document: Annex I (heading: Substances requiring monitoring, restrictions...)

⁻ Assay: substances subject to restrictions of use *

^{*} The reference of the methods of analysis applied needs to be specified (Pharmacopeia, internal methods etc). In case the botanical preparation (or where appropriate the plant) is not in a Pharmacopeia (Eur, Ph., French, DAB, USP...), the methods for identification and dosage must be included in the submission, as well as their validation.



4.1.3.Tests (e.g. ash, viscosity, ...):

[Specify the analyses performed]

4.1.4. Dosages (substances to be monitored, Ethanol content. ...)

[Specify the analyses performed]

4.1.5. Purity tests (residues, relative density, microbiological results, etc)

[Specify the analyses performed]

4.2. Substances to be monitored

4.2.1.Markers²⁴

Туре	Content limit	Method (HPLC, UV- VIS, GC,)	Standard (expressed as) / wave length of reading	Reference, official method / internal method	Validated

4.2.2.Compounds that are subject to restrictions of use²⁵

Туре	Content limit	Method (HPLC, UV-VIS, GC,)	Comments

5. STORAGE, PACKAGING, TREATMENT, TRANSPORT OF THE BOTANICAL PREPARATION

5.1. Storage conditions

[Specify the optimal conditions for Storage and conditions applicable to storage]

5.2. Retest period²⁶

²⁴ Markers / tracers / active compounds in the preparation. Specify for each of the markers the identity, nature, minimum and/or maximum levels and method of assay (UV, HPLC, UPLC, GC, GC-MS, quantitative TLC, etc...). Specify the standard used and a brief description (e.g. C18 - 210nm, HPLC as cyaniding, etc)
Specify if the method is internal (in case an official method does not exists) or official.

Analytical results must confirm the values of the specifications files and be available for each batch supplied.

²⁵ Where applicable, as with markers and tracers, specify the substances that are subject to restrictions of use, level and method of analysis, etc. Where not applicable, justify the reason Under the heading "comments ".

²⁶ The dates of the reanalysis are usually determined on the basis of the results of stability studies available The supplier needs to justify the date of recontrol of the preparation



- Stability data:				
□ No				
□ Yes				
[Specify]				
5.3. Homogenisations (sampling, use)				
- Required before sampling:				
□ No				
☐ Yes				
[Specify]				
- Required before use:				
□ No				
□ Yes				
[Specify]				
5.4. Labelling / Conditions for transport and storage				
[Specify]				
5.5. Packaging				
- Type:				
[Describe the container]				
- Food contact material safe for use in food (certificate):				
□ No				
□ Yes				
5.6. Other information				
 Linked to packaging (e.g. desiccant, nitrogen): 				
- Indicated?				
□ No □ Yes				

For information, the requirements ICH (Which is the pharmaceutical standard) Specify that :

Shelf life testing must apply to 3 batches Under the following conditions:

- ☐ Accelerated conditions: (40°C/75% HR): T0, T3, T6
- ☐ Intermediate conditions: (30°C/65% HR): T0, T3, T6, T9, T12
- ☐ Long term conditions: (25°C/60% HR): T0, T3, T6, T9, T12, T18, T24, T36

The parameters are likely to vary over time: physical, chemical, biological and microbiological properties must be retested regularly. These conditions may be adapted to specific climatic zones.



- Further treatment:

....

Attach the Material Safety Data Sheet (MSDS) of the preparation

Attach the certificate of conformity with food contact of the primary packaging

RISK ANALYSIS AND QUALITY CONTROL

To be established in function of the supplier, the nature of the plant or the botanical preparation, the manufacturing process, etc.

In case of a new supplier: Systematic analysis of the lots received until a sufficient experience has been gathered to proceed to periodic controls

The analysis can be focused in function of the potential risks identified:

- Adulteration: Identification tests (e.g.: Ginseng leaf instead of root, Cimicifuga foetida instead of C. racemosa, etc)
- Contaminants: Raw materials which present potential risk (e.g. : pesticides on Ginseng, ...)
- Process related: Solvent residues
- Added substances: Vitamins, beta-sitosterols, etc
- Dilutions with additives or bulking substances: levels of markers.
- Consistency with the price of the raw material, the ratio plant/extract, the declared solvents and level of markers

ANNEXES

- Product Specifications File
- Material Safety Data Sheet
- Process Flow Chart
- GACP, where available
- Control Plan, where applicable
- Example of a Certificate of Analysis
- Stability data, if available:
- Any other relevant document

This questionnaire is courtesy of SYNADIET (French Food Supplements Association).

Translation and adaptations are the sole responsibility of the European Botanical Forum