NAFDAC HERBAL AND FRUIT INFUSIONS REGULATIONS 2025

CLOSED FOR COMMENTS

HERBAL AND FRUIT INFUSIONS REGULATIONS 2025

Arrangement of Regulations

Regulations

National Agency for Food and Drug Administration and Control

NAFDAC Herbal and Fruit Infusions Regulations 2025

[ ] Commencement

In exercise of the powers conferred on the Governing Council of the National Agency for Food and Drug Administration and Control ('the Governing Council') by Section 30 of the National Agency for Food and Drug Administration and Control Act, Cap. N1, LFN, 2004 and Section 12 of the Food, Drugs and Related Products (Registration, Etc.) Act. Cap. F33. LFN, 2004 and of all the powers enabling it in that behalf, the Governing Council with the approval of the Minister makes the following Regulations: -

1. **Application**
   These Regulations shall apply to the requirements for Herbal and Fruit Infusions (HFI) with the exception of the use for medicinal purposes.

2. **Prohibition**
   A persons shall not manufacture, import, export, advertise, sell or distribute Herbal and Fruit Infusions in Nigeria unless it has been registered in accordance with the provisions of these Regulations.

3. **Ingredients for Herbal and Fruit Infusions**
   a. The ingredients for herbal and fruit Infusions shall consist of, but not limited to, the plants and parts of plants with the characteristics described in schedule (1) to these regulations.
   b. Flavored Herbal and Fruit infusions shall consist of flavorings and food ingredients with flavoring properties.

4. **Quality Criteria**
   a. Herbal and fruit infusions shall h**a**ve characteristic color, aroma and flavor similar to the kind of herb or fruit from which it is made.
   b. The infusions shall be clean and reasonably free from foreign matters and shall not be adulterated.

5. **Compositional requirements**
   The values for the content of acid insoluble ash in the dry mass, moisture and essential oils shall be as provided in Schedule (2) to these regulations.

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6. **Maximum limits of contaminant**
   a. Heavy metals
   Heavy metal contaminants, if present, shall comply with the limits specified in Schedule (4) to these regulations.
   b. **Mycotoxin**
   The maximum level of mycotoxin in herbal and fruit infusions shall comply with the limits

as specified in Schedule (5) to these regulations.

c. **Microbiological**

The maximum level of microbial contaminants in herbal and fruit infusions shall comply with the limits as specified in Schedule (6) to these regulations.

7. **Labelling**

In addition to the provisions of the Pre-packaged Food (Labelling) Regulations, the following specific requirements shall apply:

a. Herbal and Fruit Infusions shall be designated by the name of the type of the plant or part of the plant used in combination with the word "infusion".
b. Where the HFI is derived from two types of plants and fruits, it shall be named with the combination of the types of plants or fruits.
c. The expression "blend" shall form part of the product name in the case where one type of plant with the exception of tea obtained from (*Cameilia sinensis*) accounts for a considerable percentage of the total weight and determines the character of the product in the combination of plant as in "lemon balm blend" or "lemon balm tea blend".
d. Where tea *(Cameilia sinensis*) is used and the presence of it is emphasized, the tea content shall be stated in percentage of the product.
e. Where a flavour has been added to HFI in order to render a distinctive specific flavour thereto, the product name concerned shall be preceded by the descriptive name of the distinctive flavour.
f. Pictorials may be placed on the package to represent the appropriate herbal or fruit, where such is properly labelled in the list of ingredients.
g. Products labeled as cold Brew Products shall bear a special indication that they also may be prepared with cold water (< 24ºC).
h. Extracts from HFI shall be designated by the name of the type of the plant or part of the plant used, in combination with the word "extract".

8. **Packaging**

HFI shall be packaged in closed, clean and dry food grade materials which shall not compromise the quality, safety and integrity of the product nor impart any undesirable taste or flavour to the contents thereof.

9. **Offences and Penalties**

(1) Any person who contravenes any of the provisions of these Regulations commits an offence and liable on conviction. In the case of: -

(a) an individual, to imprisonment for a term not exceeding one year or to a fine not exceeding N800,000:00 or both,
(b) a body corporate, to a fine not exceeding N5,000, 000:00.
(c) Where an offence under these Regulations is committed by a body corporate, firm or any other association of individuals, every: -
    (i) director, manager, secretary or other similar officer of the body corporate;
    (ii) partner or officer of the firm;
    (iii) trustee of the body concerned;

(iv) person concerned in the management of the affairs of the association; or

(v) person who was purporting to act in a capacity referred to in paragraphs (a) to (d) of this regulation, commits an offence and liable to be proceeded against and punished in the same manner as if he had himself committed the offence, unless he proves that the act or omission constituting the offence took place without his knowledge, consent or connivance.

10. **Forfeiture after conviction**

(1) A person convicted of an offence under these Regulations shall forfeit to the Federal Government:-

a. any asset or property constituting proceeds derived from or obtained, directly or indirectly, as a result of the offence; and

b. any of the person's property or instruments used in any manner to commit or to facilitate the commission of the offence.

(2) In this section, "proceeds" means any property derived or obtained, directly or indirectly, through the commission of the offence.

11. **Interpretation**

For the purpose of these regulations unless the context otherwise requires, the following terms shall mean:-

12. **Interpretations**

In these Regulations, unless the context otherwise requires:

Agency means National Agency for Food and Drug Administration and Control;

Foreign Matter means any material which is not from the intended plants, flavour used or fragments of plants e.g. sand, stones, metallic chips and any organic matter.

Herbal and fruit infusions (HFI)

Infusions made from parts of plants (roots, flowers, leaves, barks, fruits, seeds or twigs) which do not originate from *Camellia sinensis* (L.) 0. Kuntze and which are intended for the same use as tea.

Herbal and fruit infusions are also blends of herbal material with tea which do not fall under the category "flavoured tea".

Flavoured herbal and fruit infusions

Herbal and fruit infusions to which fragrance and/or flavouring substances are added in order to lend a specific flavour.

Extracts from herbal and fruit infusions

Water extracts of HFI which have been dehydrated.

Tea means the product derived solely and exclusively from the tender shoots and leaves of

varieties of the species *Camellia sinensis* (*L.)* O. Kuntze and produced by acceptable processes (e.g. withering, leaf maceration, aeration, drying, etc.) intended for making a brew suitable for consumption as a beverage;

Packaging means the immediate package in which tea or a related product is presented for sale to the consumer, including the filter bags, aluminum foil or any other suitable material containing such units that are packed inside a container.

13. **Citation**

These Regulations shall be cited as Herbal and Fruit Infusions Regulations, 2025

MADE at Abuja this……Day of ……..2025.

…….

Chairman Governing Council
National Agency for Food and Drug Administration and Control (NAFDAC)

Schedule 1

Characteristics of Common Ingredients for Herbal und Fruit Infusions

1.	Anise	Anise (fruits) Consist of the ca. 2 mm long, greyish to greyish brown, finely ridged and finely pubescent, obpyriform and laterally somewhat compressed stalked cremocarps from *Pimpinella anisum* L.. The mericarbs have five more or less straight ridges. The odour is reminiscent of anethole, the taste is sweetish and aromatic (anisseed-like).
2.	Apple	Apple (fruits) Consist of small pieces of the whole dried fruit from the genus Malus. Especially domesticated apple (*Malus domestica* Borkh.) and crab apple (*Malus sylvestris* (L.) Mill.) are used. The colour varies from white to off-white to brownish, depending on which type is used. The smell is mildly apple-like; the taste is sweet sour. Pomace or similar residues from fruit juice production, pectin production etc. are not used.
3.	Apple Mint	Apple Mint (leaves) Consist of the dried leaves and petioles from *Mentha suaveolens* Ehrh. The margins of the leaves are covered with silver hair. It has a fruity aromatic smell and taste.
4.	Basil (Leaves)	Whole or crushed dried pieces of herb consisting of leaves, tender stem and flower parts (often calyx) of *Ocimum tenuiflorum* (syn. *Ocimum sanctum*) belonging to the family Lamiaceae. The herbs has sweet, pungent, clove-like, somewhat bitter green/herbaceous aroma. *Identification:* Leaves simple, opposite, petiolate, ovate or elliptical with an acute or obtuse apex, up to 5 cm long and 3.5 cm wide, green or purple, with an entire or serrated margin and pubescent on the surfaces. Fragments of petiole and stem twisted, hairy, purplish-brown or dark green-black, subquadrangular, petiole thin up to 3 cm long, stem herbaceous or woody and fibrous, thicker and highly branched. Fragments of Calyx, if present, membranous, veined, 3 to 4 mm long, ovoid or campanulate bi-lipped with upper lip broadly obovate and shortly apiculate, lower lip longer with two short lateral and larger central mucronate teeth. Corolla about 4 mm long, pubescent; fruit consisting of 4 nutlets enclosed in a calyx, each nutlets sub globose, highly compressed, nearly smooth; pale brown or reddish with a small black hilum and each with one seed. Seed rounded to ovoid brown about 0.1 cm long.
5.	Bilberry	Bilberry (fruits)

		Consist of the dried fruits from *Vaccinium myrtillus* L. Synonyms for the fruit include blueberry, huckleberry and wild berry. The blue-black fruits, which can be up to 1 cm in diameter, have blue flesh and juice. The taste is sweet and aromatic. Pomace or similar residues from fruit juice, puree-production, etc. are not used.
6.	Bitter Orange	Bitter Orange (leaves) Consist of whole or crushed dried leaves and petioles from certain varieties of *Citrus aurantium* L. The leaves are large and oval, slightly pointed, with clearly articulated petiole and are more or less winged. The leaf is leathery, increases in thickness towards the margins, yellow-green and is dotted with oil reservoirs. The smell is aromatic and the taste is sweetish, aromatic and heavy.
7.	Bitter Orange	Bitter Orange (flowers) Consist of the whole or crushed dried inflorescence and petals of certain varieties of *Citrus aurantium* L.. The smell is aromatic and the taste is sweetish, aromatic and heavy.
8.	Bitter Orange	Bitter Orange (peels) Consist of the dried fruit peels from *Citrus aurantium* L., whereby in addition to the outer layer (flavedo), parts of the spongy white parenchyma (albedo) are also present. The smell and taste are piquant and aromatic, typical of orange and slightly bitter. Product residues from etheric oil extraction, pectin production etc. are not used.
9.	Black Chokeberry	Black Chokeberry (fruits) Consist of the dried fruits from *Aronia melanocarpa* (Michx.) Elliott. The roundish, 6 to 13 mm large, violet-black fruits have an intensively red coloured fruit flesh. The fruits have a sweet to sour, tart aroma. Pomace or similar residues from fruit juice-,puree-production etc. are not used.
10.	Blackberry	Blackberry (leaves) Consist of the dried leaves and stems of *Rubus fruticosus* L.. Thorns are characteristically observed on the leaf veins, petioles and small pieces of the stems. The upper side of the leaves is green and has few hairs; the underside is felt-like. The smell is only faintly noticeable; the taste tends to be sour and astringent.
11.	Blackcurrant	Blackcurrant (fruits) Consist of the dried fruits of the currant bush, *Ribes nigrum* L.. The smell is faint. The taste is sweet-sour, typical of blackcurrant. Pomace or similar residues from fruit juice-, puree-production, etc. are not used.
12.	Blackcurrant	Blackcurrant (leaves) Consist of small pieces of the slightly wrinkled leaves with a dark green upper surface and light grey-green lower surface from *Ribes nigrum* L.. A scattering of dots can be seen on the lower surface which is due to the presence of shiny yellowish glandular trichomes (hand lens). The margins of individual leaves are coarsely serrated with pointed teeth. Yellow-green, grooved remnants of petioles are often present. The smell and taste of the dried plant material is

		faintly reminiscent of blackcurrants.
13.	Chamomile	Chamomile (flowers) Consist of the dried whole or crushed inflorescence from *Matricaria recutita* L. (syn. *Matricaria chamomilla* L.) including a technically unavoidable amount of other aerial plant parts. The flower-heads have yellow turbular florets surrounded by a ring of white ligulate florets, the receptacle is light green to grey-green, conical and hollow. The smell and taste are aromatic; the aftertaste is slightly bitter.
14.	Chichory	Chichory (roots) Consist of the roasted root from *Cichorium intybus* L.. The root is prickly and woody. It has a thick cortex and is surrounded by brown cork tissue. Sometimes pieces of roots have a fine striation. The root pieces turn brown during the roasting procedure. The smell and taste are typically similar to coffee.
15.	Cornflower	Cornflower (corn silk) Consist of the dried mostly blue flower heads from *Centaurea segetum* Hill (syn. *Centaurea cyanus* L.). The smell is not clearly discernible; the taste faintly sweet to faintly salty.
16.	Cranberry	Cranberry (fruits) Consist of the whole or cut dried red to violet fruits of *Vaccinium macrocarpon* Aiton which are light and buoyant due to air inclusions. The oval shaped berries have a characteristic tart sweet-sour taste. The berries scent citrus-like and a bit as lilac.
17.	Daisy	Daisy (flowers) Consist of the dried whole capitulum from *Bellis perennis* L. on which the whitish ray florets and the yellow tubular florets are visible. The dried plant material has a faintly perceptible smell and a faintly bitter taste.
18.	Dandelion	Dandelion (herb) Consists of the dried, aerial parts of *Taraxacum* sect. Ruderalia / *Taraxacum officinale* auct. harvested before the flowering period. The leaves of this stemless, polymorphous herb grow in a rosette, very variable, oblong-spathulate or lanceolate-spathulate. The leaf fragments may be glabrous or villous. They often have a violet coloured midrip, reddish violet petiole fragments, unripe inflorescences, and only occasional yellow ligulate with a white pappus. The odour is faint, characteristic. The taste tends to be somewhat bitter, herbaceous and nutty.
19.	Elder	Elderberry (fruits) Consist of the dried, very wrinkled, more or less spherical drupes from *Sambucus nigra* L.. The dark violet-black berries contain three elongated stones each, which in turn, contain one seed each within the hard endocarp. Occasionally fruit petioles are present. The smell is unique; the taste is sweet-sour with a characteristic aroma. Pomace or similar residues from fruit juice-, puree-production, etc. are not used.
20.	Elder	Elder (flowers)

		Consist of the individual flowers that are stripped from the inflorescences (cymes, thyrses) by sieving, but sometimes, for operational reasons, are just cymes from *Sambucus nigra* L. cut into small pieces. The small flowers are off-white with connated, five-lobed corolla. They have a faint typical smell and a slimy sweet strong aromatic taste.
21.	Eucalyptus	Eucalyptus (leaves) The dried material consists of only the adult leaves and not the oval primary leaves from particularly eucalyptol-rich varieties of *Eucalyptus globulus* Labill.. The dense, leathery, grey-green, crumbly parts of the leaf blade show numerous brown lenticels. The main leaf vein is very prominent on the underside of the leaf. A strong aromatic smell reminiscent of camphor develops when the leaves are ground. The taste is bitter and slightly astringent.
22.	Fennel	Fennel (fruits) Consist of whole or crushed, mature, dried, yellow-green to brownish schizocarp or parts of the schizocarp or seed, often with remains of the pistil, fruit stalk and carpophore of *Foeniculum vulgare* var. *vulgare*. The seeds are slightly curved and have five light coloured, clear ribs. The variety vulgare has a very piquant smell and has a piquant aromatic, bitter-sweet, fennel-like taste. The smell of the variety *dulce* (Mill.) Baltand & Trabut is pleasantly piquant and the taste sweetish, mildly piquant, fennel like.
23.	Ginkgo	Ginkgo (leaves) Consist of the dried, deep green to yellow-green leaves of *Ginkgo biloba* L., which usually has two-lobed leaves. The margins of the leaf are laterally smooth, otherwise slightly undulated. The leaf veins reticulate nervature runs parallel without a midrib often show dichotomous ramification. The smell is faint and characteristic of the species; the taste is slightly bitter.
24.	Ginger (Rhizome)	Dried, whole or cut rhizome of *Zingiber officinale* Roscoe belonging to the family Zingiberaceae. The rhizome has characteristics aromatic odour, spicy and burning taste. *Identification:* The colour of rhizome varies from dark yellow to light brown and Rhizome laterally compressed, bearing short, flattened and obovate branches on the upper side, each sometime having a depressed scar at the apex.
25.	Ginseng	Ginseng (roots) Consist of the dried, cylindrical, tapering root of *Panax ginseng C.* A. Mey.. The root, which is covered with horizontal wrinkles on its upper half, divides several times from the middle downwards. The roots often bear head-like remains of truncated branches. The light yellow to light brown cortex of the root contains scattered small red-orange resin reservoirs. The flesh inside the root is white to yellowish, hard, horny and brittle. The smell is pleasant; the taste is in the beginning bitter and then sweet and mucilaginous.
26.	Grapefruit	Grapefruit (peels) Consist of dried fruit peels of *Citrus paradisi* Macfad. whereby in addition to the outer layer (flavedo), parts of the spongy white parenchyma (albedo) are also present. The smell and taste are piquant, aromatic, typical of grapefruit and

		slightly bitter. Product residues from etheric oil extraction, pectin production etc. are not used.
27.	Greek Mountain Tea	Greek Mountain Tea (herb) Consist of the dried, aerial parts from *Sideritis spec.* that are gathered during the flowering period. The leaves and stems are aromatic.
28.	Hazelnut	Hazelnut (leaves) Consist of the dried leaves of *Corylus avellana* L. The leaves are roundish, slightly asymmetrically pointed; the leaf margin is doubly serrated. The primary subsidiary veins are very prominent. Single hairs are found along the veins on the lower surface of the leaf. The smell and taste are faint.
29.	Heartsease	Heartsease (herb) Consists of the dried herb of *Viola tricolor* L.. The petals can be yellowish, white, blue or blue-violet. The dried plant material has a faintly perceptible smell and tastes slimy mucilaginous and sweet.
30.	Hibiscus	Hibiscus (flowers [calyxes]) Consist of whole or crushed dried calyxes and epicalyxes from *Hibiscus sabdariffa* L. which are collected during the fruiting period. The sepals are red to dark violet and fleshy. White varieties are also used. The sepals are white to beige. They have a faint smell and a sour taste.
31.	Honey Bush	Honey Bush (herb) Consists of the fermented or unfermented and dried aerial plant parts from *Cyclopia genistoides* (L.) Vent., Cyclopia intermedia E. Mey., *Cyclopia subternata* Vogel and/or *Cyclopia sesiliflora* Eckl.& Zeyh. which are collected during the flowering period. The smell and taste are honey-like and sweet.
32.	Larkspur	Larkspur (flowers) Consist of the dried flowers, the wrinkled, blue or blue-violet sepals and petals as well as the wide brown-violet stamens from *Consolida regalis* Gray (syn. *Delphinium consolida* L.). The dried plant material has a faint honey-like smell and tastes mildly astringent.
33.	Lemon	Lemon (peels) The dried plant material is derived from fully developed, but not completely mature lemons of the species *Citrus limon* (L.) Burm.f.. The dried fruit peels from *Citrus limon* (L.) Burm.f. consist of the outer layer (flavedo) as well as parts of the spongy white parenchyma (albedo). The outer pericarp layer is usually peeled off as a continuous spiral strip and dried. The small pieces are brownish yellow on the outside, dotted with dimples and whitish on the inside. They have a characteristic smell and a somewhat sour and faint bitter taste similar to lemon. Product residues from etheric oil extraction, pectin production etc. are not used.
34.	Lemon Balm	Lemon Balm (leaves) Consist of the whole or crushed dried leaves and parts of the upper shoots from *Melissa officinalis* L.. The leaf margin is irregularly crenated or serrated. The upper leaf surface is sparsely covered with hair. The lower surface is almost hairless or is only sparsely covered with hair along the veins, but dotted with

		fine glands. The smell and taste are aromatic and reminiscent of lemon.
35.	Lemon Verbena	Lemon Verbena (herb) Consists of whole or cut, dried leaves and upper shoot regions from the verbena family (Verbenaceae) *Aloysia citriodora* Palau (syn. *Lippia triphylla* (L'Hér.) Kuntze). The serrate leaves have a lemon-like smell and taste.
36.	Lemongrass	Lemongrass (herb) Consists of the dried, cut aerial plant parts from *Cymbopogon* spec. The leaves have parallel venation and are light green to soft brown. The smell and taste are clearly lemon-like.
37.	Lime	Lime (peels) Consist of the dried fruit peels from *Citrus aurantiifolia* (Christm. & Panz.) Swingle, whereby in addition to the outer layer (flavedo), parts of the spongy white parenchyma (albedo) are also present. The smell and taste are aromatic, typical of lime and slightly bitter. Product residues from etheric oil extraction, pectin production etc. are not used.
38.	Lime, Linden	Lime, Linden (leaves) Linden leaves consist of the stalked, usually heart-shaped and often asymmetrical leaves from *Tilia cordata* Mill., *Tilia platyphyllos Scop.* or *Tilia tomentosa Moench* (syn. *Tilia argentea* DC.). The leaves are more or less abundantly covered with simple or star-shaped hairs, usually denticulated or serrated to the point of being almost lobed and more rarely smooth-edged. The smell is faintly aromatic; the taste pleasantly aromatic.
39.	Lime, Linden	Lime, Linden (flowers) Consist of the flowers of *Tilia cordata* Mill. or *Tilia platyphyllos Scop*. As far as *Tilia cordata* Mill. and *Tilia platyphyllos Scop*. Are concerned, the fragments of pale yellowish green entire bracts with a distinct reticulate nervature, which are partly fused with the lower stalk, are characteristic. *Tilia tomentosa Moench*. (syn. *Tilia argentea* DC.) has densely pubescent bracts, its flowers have petalaceous staminodes. There are also yellowish white flowers with the five sepals and five free petals, numerous stamens, and a densely pubescent superior ovary. Occasionally, buds are also present. The odour is characteristic and faintly aromatic. The taste is sweetish, mucilaginous and pleasant.
40.	Liquorice	Liquorice (roots) Consist of the dried, unpeeled and/or peeled roots and stolons of *Glycyrrhiza glabra* L. In the cut condition, the drug is characterized by more or less cylindrical, roughly fibrous, distinctly lemon-yellow pieces which can be readily split longitudinally. The unpeeled liquorice includes small pieces with wrinkled, grey to brownish shreds of cork. The smell is faint, but characteristic, the taste is very sweet and mildly aromatic and liquorice-like.
41.	Mallow	Mallow (flowers) Consist of the fused foliaceous 5-part calyx together with the epicalyx of three lanceolate segments from *Malva silvestris* L.; all the sepals are pubescent. There

		are five pale violet or dark bluish violet obovate petals, which are emarginate at the tip and which have a white beard at the base. The numerous stamens are fused to form a tube and the style has ten thread-like, violet stigmas. Occasionally, the flattened, 10-locular ovaries are present. The taste is typical and mucilaginous.
42.	Mallow	Mallow (leaves) Consist of the roundish, three to seven-lobed, long-petioled leaves from *Malva silvestris* L. The leaves have palmate venation and a notched, dentate leaf margin. The taste is typical and mucilaginous.
43.	Mandarin Orange	Mandarin Orange (peels) Consist of the dried fruit peels from *Citrus reticulata* Blanco (syn. *Citrus deliciosa* Ten.), whereby in addition to the outer layer (flavedo), parts of the spongy white parenchyma (albedo) are also present. The smell and taste are aromatic, typical of mandarin orange and faintly bitter. Product residues from etheric oil extraction, pectin production etc. are not used.
44.	Marigold	Marigold (flowers) Consist of the dried flower heads from *Calendula officinalis* L., which comprise the golden yellow, three-toothed ligulate florets, small tubular florets and a green involucre. Sporadically bent, comb-shaped fruits are present. The dried plant material has a faint, typical smell and tastes slightly bitter and salty.
45.	Moringa (Leaves)	Whole or crushed dried Leaves of *Moringa oleifera* belonging to the family Moringaceae. The leaves has unique aroma and bitter in taste. *Identification:* The leaves are compound and leaflets are alternate. Leaflets have bright green color on dorsal and pale green on ventral surface, measures about 2-2.5cm long 1-1.5 cm wide, shape is ovate/oblong, margins are entire and has reticulate venation.
46.	NEEM (Leaves)	Whole, dried leaves of *Azadirachta indica* A. Juss *var.* Neem belonging to the family Meliaceae. *Identification:* Leaflet thin and fragile, ovate to lanceolate, 3 to 10 cm long and 1 – 2.5 cm wide, curved with a serrate margin; base markedly asymmetrical, apex acuminate and terminating in a fine point; upper surface dark brownish-green, lower surface paler with distinct midrib and lateral veins running to the midrib; both surface glabrous.
47.	Nettle	Nettle (herb) Consists of the aerial parts of *Urtica spec.* of the genus *Urtica,* collected during the flowering period and dried. The leaf fragments are shrivelled and often crumpled up into a ball. The upper surface is greenish black and the lower surface is pale green. Pieces of the square stem are mostly flattened, green to brown and deeply grooved. Occasional pieces of the green flowering panicles may be present.
48.	Peony	Peony (flowers) Consist of dried, dark red, wrinkled petals from *Paeonia officinalis* L. It smells somewhat honey-like and has a tart and astringent taste
49.	Peppermint	Peppermint (leaves)

		Consist of the whole or crushed dried leaves and parts of the upper shoot apices from *Mentha* × *piperita* L.. The leaves are thin, dark, occasionally light green and strongly serrated on the margins. Leaf veins and stems usually have a red-violet colouring. The stems are squarish. The smell and taste are very aromatic and cooling.
50.	Raspberry	Raspberry (leaves) Consist of the dried leaves and stems from *Rubus idaeus* L.. The upper surface of the leaves is dark green to brownish green and the lower surface is covered with a dense tomentum. The margin is sharply serrated. The petioles and stems are green or have a reddish colour. The smell is faint; the taste tart.
51.	Raspberry	Raspberry (fruits) Consist of the dried fruit parts of the aggregate fruits von *Rubus idaeus* L. The red fruit flesh has an intensively sweet as well as a characteristic aroma. Pomace or similar residues from fruit juice-, puree-production, etc. are not used.
52.	Rooibos	Rooibos (herb) Consists of the dried and cut aerial parts of the plant and leaves from *Aspalathus linearis* (Burm.f.) R. Dahlgr.. The small pieces are oblong lanceolate in form. Fermented rooibos is red brown in colour; smell and taste are slightly sweet and reminiscent of black tea. Green rooibos is unfermented rooibos and has a greenish colour. The smell is reminiscent of hay; the taste is pleasantly spicy, herbal and mild.
53.	Rose	Rose (petals) Consist of the dried mostly pink to brownish petals or whole flower buds from *Rosa spec.* As a rule, only the pink to brownish petals are used. The material smells and tastes typically of roses.
54.	Rose Hip	Rose Hip (fruits) Consist of pseudo-fruits from *Rosa canina* L.. To a large extent rose hips are free of plant hair and contain a technically unavoidable content of seeds (up to 10%). The exterior of the pseudo-fruits are glossy red to red brown; the interior is light. The smell and taste are faintly sweet-sour.
55.	Safflower	Safflower (flowers) Consist of the dried disk florets from *Carthamus tinctorius* L.. Its colour can vary from a rich yellow to red-orange. Smell and taste are faint and typical.
56.	Sage	Sage (leaves) The dried plant material consists of small broken pieces of leaves from *Salvia officinalis* L. that are often stuck together due to the fine hair covering both sides of the leaves. The network of veins can be seen on the lower surface of the leaves. The material has a strong piquant, aromatic smell and a spicy bitter and astringent taste.
57.	Sandy Everlasting	Sandy Everlasting (flowers) Consist of the dried stamineous, lemon yellow, glossy, imbricated and slightly erect involucral leaves of *Helichrysum arenarium* (L.) Moench. The yellow orange tubular corollas are in the middle of the flower; the very small ray florets are

		usually not easily recognized. They have a yellow crown of hair. The smell of the dried plant material is weakly perceptible and tastes somewhat bitter and piquant.
58.	Sea Buckthorn	Sea Buckthorn (fruits) Consist of the dried, oval, orange-coloured accessory fruits from *Hippophae rhamnoides* L.. The fruits have a sour taste. Pomace or similar residues from fruit juice, puree production, etc. are not used.
59.	Spearmint	Spearmint (leaves) Consist of the whole or crushed, dried leaves and shoot apices from varieties of *Mentha spicata* L. The veins are set deep into the upper dark green surface; the leaf surface bulges out; the veins are prominent on the leaf underside. The leaf margin features curved, pointed teeth. The stems are squarish. All parts smell and taste are spicy sharp, however lacks the cooling aftertaste of peppermint.
60.	Stevia	Stevia (leaves) Consist of the whole or cut dried leaves of *Stevia rebaudiana* (Bertoni) Bertoni. The oval-elliptic leaves are green to brownish green and sessile, with an elongate-lanceolate or spatulate, blunt tipped lamina which is serrate from the middle to the tip and entire below; the upper surface is slightly glandular pubescent. The odour is characteristic and herbaceous. The taste is characteristic, herbaceous and intensively sweet.
61.	Strawberry	Strawberry (leaves) Consist of the dried leaves and individual stems with flowers of *Fragaria* × *ananassa* Duchesne. The upper surface of the leaf pieces are light green while the lower surface is covered with silky hair and the leaf edges are sharply serrated. The leaves have an unspecific smell; the taste is slightly bitter and aromatic.
62.	Strawberry	Strawberry (fruits) Consist of small pieces of the dried accessory fruit from *Fragaria* × *ananassa* Duchesne. The small yellow achenes are on the surface of the fruit. The red fruit flesh has an intensively sweet and characteristic aroma. Pomace or similar residues from fruit juice-, puree-production etc. are not used.
63.	Sunflower	Sunflower (petals) Consist of the dried ligulate florets from *Helianthus annuus* L. The smell and taste are aromatic and sweetish.
64.	Sweet Blackberry	Sweet Blackberry (leaves) Consist of the dried leaves and stems of *Rubus chingii* var. *suavissimus* (S. Lee) L.T. Lu (syn. *Rubus suavissimus* S. K. Lee.). Both sides of the green leaves are covered with hair; the margins of the leaf are doubly serrated. The three to seven-lobed form of the leaves and the prickles on the petioles are characteristic. The smell is only faintly noticeable; the taste is sweet, herbal with slightly bitter nuances.
65.	Sweet Orange	Sweet Orange (leaves) Consist of dried leaves and petioles from different varieties of *Citrus sinensis* (L.) Osbeck. The leaves are large and oval, slightly pointed, with clearly articulated

		petiole. The leaf is leathery, increases in thickness towards the margins, yellow green and is dotted with oil reservoirs. The smell is aromatic and the taste is sweetish, aromatic and heavy.
66.	Sweet Orange	Sweet Orange (flowers) Consist of the whole or crushed dried inflorescence and petals of certain varieties of *Citrus sinensis* (L.) Osbeck. The smell is aromatic and the taste is sweetish, aromatic and heavy.
67.	Sweet Orange	Sweet Orange (peels) Consist of the dried, beige-yellowish to orange- reddish fruit peel from different varieties of *Citrus sinensis* (L.) Osbeck, whereby in addition to the outer layer (flavedo), parts of the spongy white parenchyma (albedo) are also present. The smell and taste is aromatically fresh, typical of orange and slightly bitter. Product residues from etheric oil extraction, pectin production etc. are not used.
68.	Sweet Violet	Sweet Violet (flowers) Consist of the dried dark violet, occasionally white or pink coloured flowers from *Viola odorata* L. The spur-like protuberance of the lower petal is the same colour and overhangs the extensions of the green calyx. The material has a characteristic sweet smell and taste.
69.	Turmeric (Rhizome	Dried and crushed rhizome of *Curcuma longa* L. with roots and outer surface removed, belonging to the family Zingiberaceae. It has bitter, pepper like flavour and earthy aroma. *Identification:* The rhizome is ovate, oblong-ovoid, pyriform or cylindrical, often branched, up to 6 cm and 15mm thick. The primary rhizome shows scars from the lateral branches. The surface is slightly dusty, spotted and brownish yellow, yellow or brownish grey, finely striated. The fracture is granular, smooth, nonfibrous, slightly glossy, uniformly orange yellow; it shows a narrow cortex that is darker on the outside.
70.	Walnut	Walnut (leaves) Consist of the dried pinna from *Juglans regia* L.. Both side of the dried and cut plant material is brownish green; the material is crumbly and somewhat stiff. On some areas, an almost rectangular tessellation can be seen along the smooth leaf margin and on the lower leaf surface that is formed by the leaf veins. The dried plant material has a faint aromatic smell and an astringent faintly bitter, scratching taste.
71.	White Jasmine	White Jasmine (flowers) Consist of the dried flowers from *Jasminum officinale* L. The initially white flowers with five stellate petals are dirty white to brownish light yellow in the dried state. They possess a characteristic intensive flowery, aromatic smell and taste.
72.		**Caffeine-containing HFI**
73.	Cocoa	Cocoa (seeds) Consist of seeds from *Theobroma cacao* L. The cocoa fruit is a cucumber-like fruit in which white, bitter-tasting seeds (cocoa beans) are embedded in the

		mushy fruit flesh. The seeds are fermented for several days, through which they lose their bitterness and take on the brown colour and characteristic aroma. If the husks of the seeds are used this is labelled accordingly.
74.	Cola Nut	Cola Nut (seeds) Consist of the dried kernels from *Cola acuminata* (P. Beauv.) Schott & Endl. or *Cola nitida* (Vent.) Schott & Endl. (syn. Cola vera K. Schum.) from the genus Cola that are often collapsed into the two seed leaves. The appearance of cola seeds varies; most are spherical to ovoid or somewhat angular; the exterior is wrinkled, brown or red brown and the interior is cinnamon brown. They are very hard and have a granular structure. The dried plant material is odourless and tastes somewhat astringent and bitter.
75.	Guarana	Guarana (seeds) Consist of the glossy, dark brown seeds from Paullinia cupana H.B.K., which are spherical or are flattened on one side and have a large, light brown scar. The seed coat is thin, brittle and can be easily removed. The seeds have no clearly perceptible smell and taste is bitter.
76.	Maté	Mate (leaves) Consist of the dried, roasted or unroasted, crushed leaves and parts of the shoots of the yerba mate tree *Ilex paraguariensis* A. St.-Hil.. Depending on the treatment, mate leaves are light green or medium to dark brown in colour. Green mate smells mildly aromatic. It has a spicy, mildly astringent and slightly bitter taste. Roasted mate has a smoky, roasted smell. It has an astringent, slightly burnt and mildly bitter taste.

Schedule 2

Values for the content of acid insoluble ash in the dry mass (d.m.) and for the loss on drying which as a rule should not be exceeded and essential oil in a selection of herbal and fruit infusions (mono product)

Product	**Max. acid insoluble ash % d. m.**	**Max. loss on drying %**	**Min. essential oil % d. m.**
Apple (fruits)	1.0	13	No Threshold provided
Camomile (flowers)	2.5	13	0.2
Fennel (fruits)	2.5	12	1.0
Hibiscus (flowers)	2.5	15	No Threshold provided
Honey bush (herb)	1.0	11	No Threshold provided
Lemon balm (leaves)	2.5	14	No Threshold provided
Lemon verbena (herb)	3.5	12	0.15
Lemongrass (herb)	5.0	11	No Threshold provided
Lime, Linden (flowers)	2.5	13	No Threshold provided
Liquorice (roots)	2.0	12	No Threshold provided
Mate (leaves)	1.0	10	No Threshold provided
Nettle (herb)	5.0	14	No Threshold provided
Peppermint (leaves)	2.5	13	0.6
Rooibos (herb)	2.0	12	No Threshold provided
Rooibos, green (herb)	2.0	12	No Threshold provided
Rose hip (fruits)	1.5	14	No Threshold provided
Sage (leaves)	2.0	14	No Threshold provided
Spearmint (leaves)	2.5	13	0.6
Sweet orange (flowers)	2.5	12	No Threshold provided
Sweet orange (leaves)	3.0	12	No Threshold provided

Schedule 3

Forms of products

Category	Whole product	Coarse cut, square cut	Fine cut, coarse	Fine cut, fine	Granulated material	Liquid extract	Dry extract	Dry instant preparation	Liquid product
Raw materials	Dry HFI materials	Dry HFI materials	Dry HFI materials	Dry HFI materials	Dry HFI materials	Extract from HFI, additional ingredients possible	Extract from HFI, additional ingredients possible (e.g. carriers)	Extract from HFI, additional ingredients possible	Extract from HFI, additional ingredients possible
Particle size	Product dependent	2-15 mm	0.3-6 mm	0.2-2 mm	0.2-4 mm	Solution, dispersion	Depends on product and process	Depends on product and process	Solution
Application	Loose tea, teabags, capsules	Various food preparations	Various food preparations	Instant products Instant beverages	Ready to drink products, liquid concentrates				
Example	Peppermint leaf	Coarsely cut peppermint leaf	Finely cut peppermint leaf	Finely cut peppermint leaf	Peppermint leaf mechanically compressed	Liquide and paste-like peppermint extract	Powdered peppermint extract prepared by drying a paste-like peppermint extract	Instant preparations to be dissolved in water for the preparation of a peppermint tea drink	Bottled ready-to drink peppermint tea drink

Schedule 4

Heavy Metal
Maximum Limits

Lead (Pb)	0.1 mg/kg
Cadmium (Cd)	0.1 mg/kg
Mercury (Hg)	0.1 mg/kg
Arsenic (As)	0.08 mg/kg

Schedule 5

Mycotoxin Levels

Maximum limit (μg/kg)

Aflatoxin B1, B2, G1, G2 (as sum)	4
Ochratoxin A	5

Schedule 6

Microbiological Limits

	Limits (Bulk materials)	Dry HFI (Finished products)
Aerobic Plate Count per gram	10^8	10^4
Yeasts (Max) per g	10^6	10^3
Moulds (max) per g	10^6	10^3
E. coli (max) per g	0	
Salmonella per 125g	absent	absent

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