TABLE 2. Flavouring Characteristics

		proFagus Smoke R714 (SF-001)	Smoke Concentrate 809045 (SF-003)	Scansmoke SEF7525 (SF-004)	SmokEz C-10 (SF-005)	SmokEz Enviro-23 (SF-006)	proFagus Smoke R709 (SF-008)	Fumokomp (SF-009)
References		https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8363	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8365	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8363	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8367	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8368	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8369	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8370
Source Material		The source materials used for manufacturing the Primary Product **proFagus Smoke R714 (SF-001) a**re beech(Fagus sylvatica > 90%) and oak (Quercus robur < 10%); other wood species might be present atlevels < 1%. The wood used is obtained in equal parts from industrial dried cuts(approximately 33.3%), industrial fresh cuts (approximately 33.3%) and untreated remaining material(slabs) from the wood industry (approximately 33.3%). Upon its arrival at the manufacturing site, thewood is inspected for the absence of impurities.	The source material of **Smoke Concentrate 809045 (SF-003**) is only beech wood (Fagus sylvatica L.).According to the applicant, the wood is obtained from untreated natural hardwood and is free frompesticides (Documentation provided to EFSA No. 1).	The source material of **Scansmoke SEF7525 (SF-004)** is a tar obtained by the applicant from an externalsupplier as by-product of the production of liquid smoke. According to a statement of the supplier, thetar is produced from a mixture of 30–40% red oak (Quercus rubra), 30–40% white oak (Quercus alba), 5–15% maple (Acer saccharum), 5–15% beech (Fagus grandifolia) and 5–15% hickory (Caryaovata) (Documentation provided to EFSA No. 1 and 2). The hardwoods are blended as sawdust, whichis then dried and heated to generate smoke	The source material of **SmokEz C-10** is hardwood sawdust from hard maple (Acer saccharum) (25–60%), white oak (Quercus alba) (10–40%), hickory (Carya ovata) (10–25%) and low quantities ofother wood species: white/black ash (Fraxinus americana) (0–15%), birch (Betula papyrifera and Betula alleghanisensis) (0–15%), beech (Fagus grandifolia) (0–15%) and cherry (Prunus serotina) (0–15%) (Documentation provided to EFSA No. 1). According to the applicant, the wood is not subjectedto any chemical treatment, including treatment with pesticides.	The source material of **SmokEz Enviro-23** is hardwood sawdust from white oak (Quercus alba)(20–75%), hard maple (Acer saccharum) (25–65%) and low quantities of other wood speciesincluding hickory (Carya ovata) (0–15%), white/black ash (Fraxinus americana) (0–15%), birch (Betula papyrifera and Betula alleghanisensis) (0–15%), beech (Fagus grandifolia) (0–15%) andcherry (Prunus serotina) (0–15%). According to the applicant, the wood is not subjected to anychemical treatment, including treatment with pesticides	The source materials of p**roFagus Smoke R709 (SF-008)**are beech (Fagus sylvatica > 90%) and oak(Quercus robur < 10%); other wood species might be present at levels < 1%. The wood used formanufacturing the Primary Product is obtained in equal parts from industrial dried cuts(approximately 33.3%), industrial fresh cuts (approximately 33.3%) and untreated remaining material(slabs) from the wood industry (approximately 33.3%).	The source material of **Fumokomp Conc 8SF -009).** is hardwood from beech (Fagus sylvatica L.) (85–100%)and hornbeam (Carpinus betulus L.) (0–15%). According to the applicant, the trees from which thewood is used for manufacturing the Primary Product 'do not receive any chemical treatment in the period of 1 year before felling, or after'
Method of manufacture of the Primary Product		In the manufacturingprocess, the wood pieces are dried and then subjected to pyrolysis resulting in a water insoluble tar-phase and a smoke condensate. The smoke condensate is subjected to distillation and extraction,resulting in an aqueous smoke fraction. In a second phase, these intermediates are further processedto obtain the two building blocks of the Primary Product.	The production of the Primary Product comprises the following steps:1) Smoke generation: The dried wood chips are smouldered in a smoke generator underdefined conditions.2) Condensation and absorption of smoke: The smoke is passed through a condenser andsubsequently absorbed in a water/ethanol mixture, and the formed wood tar is thendiscarded.3) Further processing: The liquid smoke is treated with activated charcoal to reduce the levelsof polycyclic aromatic hydrocarbons (PAHs). The charcoal is then removed by filtration, andthe Primary Product is obtained after removing the residual solvents by distillation.The applicant submitted a description of the manufacturing process, with information on the dryingstep and the pyrolysis conditions.	The Primary Product is obtained by (i) extracting the tar raw materialwith diethyl ether, (ii) subjecting the extracts to purification steps and (iii) combining the obtainedfractions (SEF1 and SEF2) at a defined ratio. In the first step, the extraction of an aqueous suspensionof the tar is performed under alkaline conditions (pH-adjustment by addition of sodium hydroxide).The organic phase is subjected to evaporation to remove solvent and water and subsequently tovacuum distillation. After re-dilution with diethyl ether, the obtained distillate is treated with activecarbon to remove polycyclic aromatic hydrocarbons (PAHs), and SEF1 is obtained after evaporation ofthe solvent and a final filtration (1 mm).	The Primary Product is obtained after separation from the sedimented tar andsubjecting the aqueous phase to a filtration step (1 lm).The applicant submitted a description of the manufacturing process, including information on thedrying step of the sawdust and the pyrolysis conditions.	Dried wood sawdust is pyrolysed in a reactor; the formed smoke vapour is condensed, and thecondensate is transferred into a storage tank. Then, water is added, resulting in an aqueous mixturewith less than 40% of organics, and the formation of three distinct phases. The lower, tarry phase andthe upper oily phase are discarded, and the remaining aqueous phase is filtered (1 lm). At anotherproduction site, this aqueous phase is further processed by another addition of water until the contentof organics is less than 25%. The resulting water-insoluble tarry phase is discarded.	As described by the applicant (Documentation provided to EFSA No. 1), the manufacturing processcomprises pyrolysis of the dried wood pieces and condensation of the generated wood gas. Theobtained smoke condensate is further concentrated by evaporation; after adjustment of the total acidcontent, the remaining 'pyroligneous acid' forms the smoke flavouring	The dried wood is pyrolysed in a continuously operated Lambiotte retort with automated gas-purging. The wood tar obtained by sedimentation is subsequently subjected to a series of fractionalvacuum distillations. The Primary Product is obtained by combining appropriate distillates on the basisof the intended sensory properties of the final product.

		proFagus Smoke R714 (SF-001)	Smoke Concentrate 809045 (SF-003)	Scansmoke SEF7525 (SF-004)	SmokEz C-10 (SF-005)	SmokEz Enviro-23 (SF-006)	proFagus Smoke R709 (SF-008)	Fumokomp (SF-009)
Description of the physical state and sensory characteristics		The applicant described the smoke flavouring Primary Product as a 'viscous liquid of brown colourwith a characteristic odour of freshly generated smoke'. The Primary Product has a staining index (at440 nm) ranging from 105 to 125. The applicant indicated that the Primary Product has a refraction index (at20°C) ranging from 1.388 to 1.396, a viscosity (at 25°C) ranging from 9 to 10 cP, a pH ranging from2.2 to 2.4, and an average density of approximately 1,110 g/L). The applicant described the Primary Product as 'Immiscible with water. Fully miscible withpolar solvents such as ethanol, acetone or isopropanol. Immiscible with non-polar solvents such astoluene or benzene'	The Primary Product is a brown viscous liquid with a characteristic odour of freshly generatedsmoke and has an average density (at 4 °C) of 1,275 g/L (n = 12). The pH ranges from 2.8 to 3.0,the refraction index ranges from 1.51 to 1.52, the coefficient of extinction (at 400 nm) ranges from1.9 to 2.4 and the flash point is > 100 °C	The applicant described the smoke flavouring Primary Product as a 'viscous liquid of dark browncolour with a characteristic strong odour of smoke'. The PrimaryProduct has an average density (at 20°C) of 1.1475 g/mL, refractive index (at 20°C) ranging from 1.50 to1.70 and a viscosity (at 25°C) ranging from 2,214 to 2,349 mPa s	The applicant described the smoke flavouring Primary Product as 'an aqueous amber brown liquidwith characteristics of smoke aroma and flavour' (Documentation provided to EFSA No. 1). ThePrimary Product has a pH ranging from 2.15 to 2.6, a viscosity (at 25°C) ranging from 2 to 3 cP, arefraction index ranging from 23 to 27 °BRIX and a density (at 20°C) of approximately 1,050 g/L. Theapplicant described the Primary Product as 'soluble in alcohol-based solvents and immiscible in oil-based solvents'	The applicant described the Primary Product as 'Miscible in alcohol-based solvents and immiscible inoil-based solvents' .	The applicant described the smoke flavouring Primary Product as a 'viscous liquid of brown colourwith a characteristic odour of smoke'. The Primary Producthas an average density of approximately 1,020 g/L, a refraction index (at 20 °C) ranging from 1.340 to1.355, a pH ranging from 2.0 to 2.5, a staining index (at 440 nm) ranging from 11 to 17 and aviscosity (at 20 °C) of 6 cP (n = 5)	The Primary Product is a viscous, oily, pale/intensive reddish-yellowish-brownish liquid, not misciblewith water, and is described to have an odour of leafy woods. The Primary Product has an averagedensity of 1100 g/L, a pH value ranging from 2 to 6, a refraction index (at 20°C) ranging from 1.485to 1.550, and a viscosity (at 40°C) ranging from 7.06 to 12.6 centistokes (cSt)
Pprincipal volatile constituents of the Primary Product		see compositionin the referred document	see compositionin the referred document	see compositionin the referred document	see compositionin the referred document	see compositionin the referred document	see compositionin the referred document	see compositionin the referred document
References		https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8363	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8365	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8366	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8367	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8368	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8369	https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2023.8370