

Batch Number:
20260102-ZNGO2TSF



Manufacturing
Date:
02.01.2026

TECHNICAL DATA SHEET

Product Information

Product Name: Ginger Root SFE extract (origin: Turkey), PN AF-Z

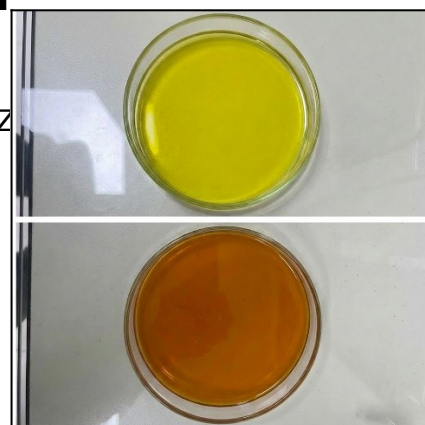
Scientific name: *Zingiber officinale*

Parts utilized for extraction: Rhizomes (dry)

Appearance: Dark-orange oleoresin

Aroma: Pungent, characteristic of gingerols

Solubility: Soluble in oil, insoluble in water



Raw Material Specification

Analysis	Method	Result
Total ash for herb	Ph. Eur. (2.4.16)	<5%
Pesticides	GC/MS, LC-MS/MS	Complies with Ph. Eur. (2.8.13)
Aflatoxins (G1, G2, B1, B2)	AOAC 999.07	Complies with Ph. Eur. (2.8.18)
Ochratoxin A	AOAC 2004.10	Complies with Ph. Eur. (2.8.22)
Benzo(a)pyrene (PAH)	JOSS 2002 25, pp. 96-100	<10 ppb

Extract Specification

Analysis	Method	Specification	Result
Zingiberene	GC-FID (in-house method)	<25 %	23.1 %
Zingerone	GC-FID (in-house method)	>2.0 %	2.7 %
Gingerols and Shogaols:			
6-Gingerol	HPLC-DAD (in-house method)	>15 %	16.6 %
8-Gingerol		>5 %	5.77 %
10-Gingerol		>20 %	28.0 %
6-Shogaol		<1 %	0.81 %
TOTAL		>40 %	51.1 %
Total volatile oil content (%)	Gravimetric method	<50 %	42.53 %
Loss on drying (%)	Ph. Eur. (2.8.17)	<5 %	3.3 %
DPPH radical scavenging IC ₅₀ value	UV-vis (in-house method)	<70 ppm	49.3 ppm
Total Phenolic Content (mg g ⁻¹ GAE)	UV-vis (in-house method)	>140 mg g ⁻¹	185.8 mg g ⁻¹
Arsenic (As)	ICP-OES (In-house method)	N.D. (< 3 ppm)	N.D.
Lead (Pb)		N.D. (< 2 ppm)	N.D.
Total aerobic microbial count (cfu/g)	ISO 4833-1	<10000	Complies
	ISO 21527-2	<100	Complies
Yeast & mold (cfu/g)	ISO 16649-2	N.D. (in 1 g)	N.D.
<i>Escherichia coli</i>	ISO 6579	N.D. (in 25 g)	N.D.

Ginger Root SFE extract - Gingerol-rich (*Zingiber officinale*), product number AF-ZNGO2TSF

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Analysis	Method	Specification	Result
<i>Salmonella</i>	ISO 13720	N.D. (in 1 g)	N.D.
<i>Pseudomonus aeruginosus</i>	ISO 6888-1	N.D. (in 1 g)	N.D.
<i>Staphylococcus aureus</i>			

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Additional Data

Storage conditions: Store in cool and dry place, keep away from intense light and high heat.

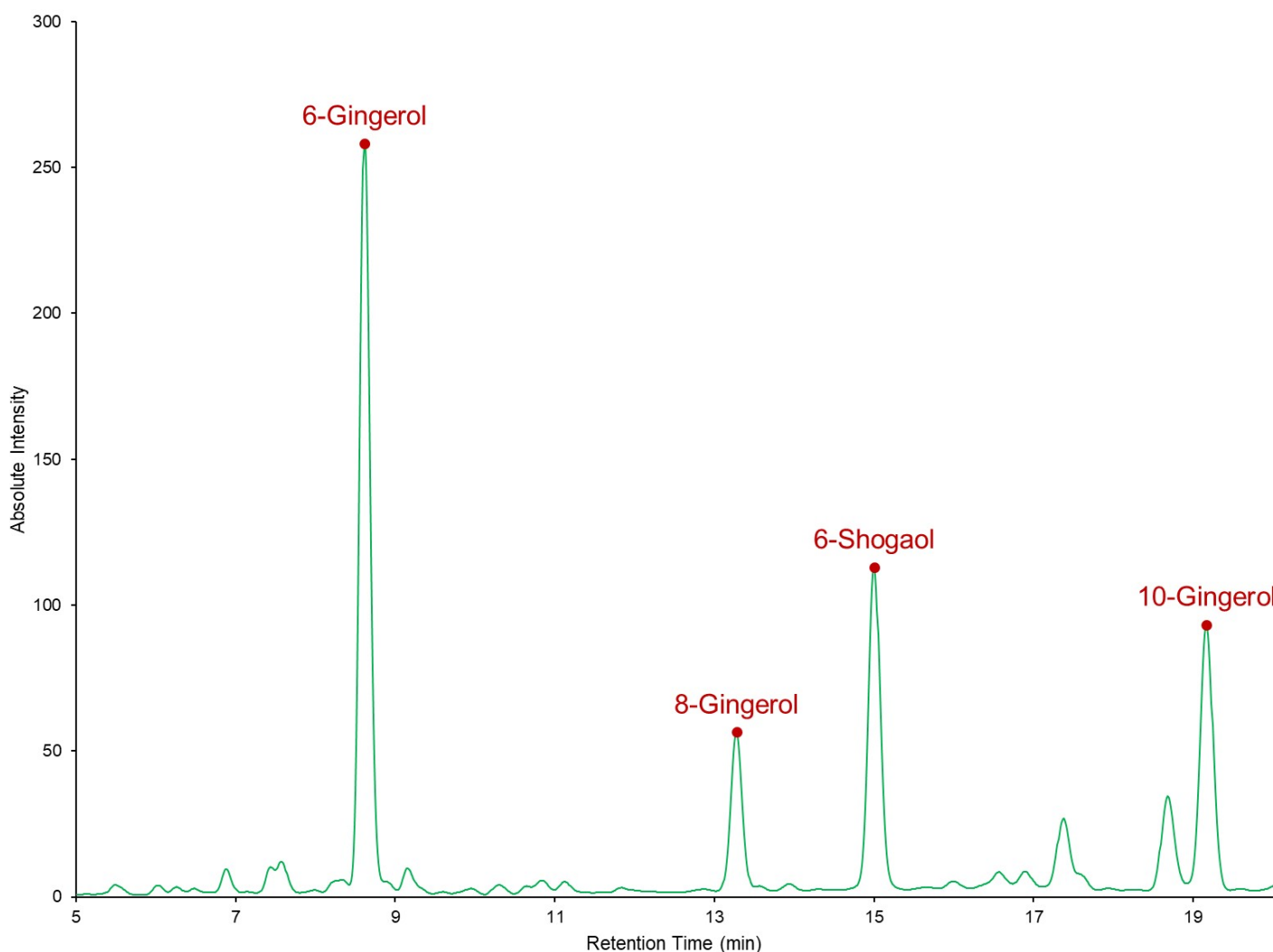
Carrier: None. This is a pure dried extract that is soluble in fixed oils and other lipophilic carriers.

Packaging: 1-5 kg/bottle, 10-25-50 kg/drum.

Shelf life: 12 months

Dosage and use: The non-volatile resinous fraction containing gingerols, shogaols, and related diarylheptanoids is responsible for pungency and bioactivity. The food and beverage industry employs ginger oleoresin extensively in soft drinks, confectionery, baked goods, sauces, and savoury seasonings where consistent flavour delivery and ease of incorporation outweigh whole spice alternatives. Nutraceutical applications focus on digestive health, anti-nausea formulations, joint support, and anti-inflammatory supplements, with products often standardized to gingerol content. Cosmetic formulators incorporate it into warming massage oils, stimulating scalp treatments, and oral care products where its antimicrobial properties complement sensory appeal.

Chromatogram (HPLC-DAD)

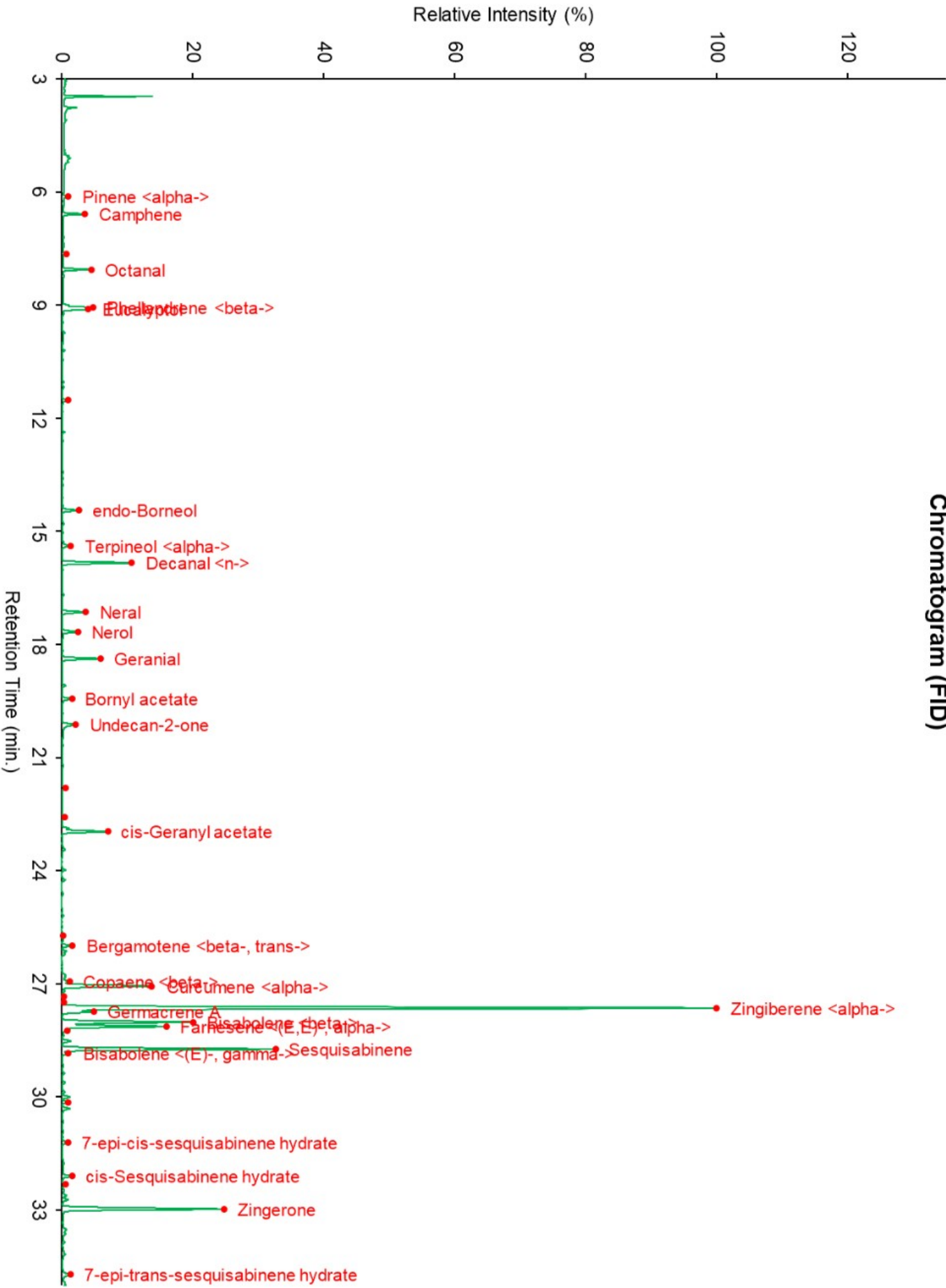


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Chromatogram (GC-FID)



Chromatogram (FID)