



CERTIFICATE OF ANALYSIS RESULTS (SHEAMAN)

(AS REPORTED BY GHANA STANDARDS BOARD)

Test Results - Sheaman

1. Unrefined Shea Butter (Sheaman)

NAME OF SAMPLE: Unrefined Shea Butter (Sheaman) **SAMPLE SIZE:** 9 x 500 g

DATE RECEIVED: 2026-01-12 **DATE(S) OF PERFORMANCE:** 2026-02-09 to 2026-02-23

SOURCE/PURPOSE: PRODUCT CERTIFICATION DEPT. /CERTIFICATION

Specifications standard: GS 238:2019

Test Code	Test Conducted	Unit	Results	Test Methods	Specifications
	Moisture	%	0.2	ISO 662:2016	> 0.05 - 0.2
	Free fatty acid	%	0.5	ISO 660:2020	1.0 max
	Insoluble impurities	%	1.0	ISO 663:2000	0.2 - 2.0
	Peroxide value	mEq/kg	2.2	ISO 3960:2017	10.0 max
	Relative density	-	0.91	IUPAC 2.101	0.91 - 0.98
	Saponification value	mgKOH/g	184.6	ISO 3657:2020	160 - 190
	Refractive index	-	1.4629	IUPAC 2.102	1.4620 - 1.4650
	Iodine value	Wijs	53.8	IUPAC 2.205	40 - 65
	Unsaponifiable matter	%	3.2	ISO 3596:2000	1-19
	Microbiology status		See attached		
	Metallic contaminants		See attached		
	Pesticides residues		See attached		

2. Shea Butter Pomade - Microbiological Results

NAME OF SAMPLE: SHEA BUTTER POMADE **SAMPLE SIZES:** 2 x 500 g

DATE RECEIVED: 2026-04-23 **DATE(S) OF PERFORMANCE:** 2026-05-05 to 2026-05-12

SOURCE/PURPOSE: PCD/ CERTIFICATION

Specifications standard: GS 955:2019

Test Code	Test Conducted	Unit	Results	Test Methods	Specifications
F-AP	APC/30°C/72hr/PCA	cfu/g	$< 1.0 \times 10^2$	ISO 4833-2 2013-09 Amd. 1 2022-01	1.0×10^3
F-YM	Yeasts/Moulds/25°C/7 days/DG-18	cfu/g	$< 1.0 \times 10^2$	ISO 21527-2 2008-07	1.0×10^2
F-SS	Salmonella/37°C/24hr/BSA/XLD	per 25 g	None Detected	ISO 6579-1 2017-02 Amd. 1 2020-03	Absent

REMARKS: The microbial load is within the acceptable limits as specified in the Standard GS 955:2019 (Microbiological Analysis of Foods - Sampling Plans and Microbiological Criteria).

3. Unrefined Shea Butter (Sheaman) - Pesticide Residues Analysis

TITLE: Analytical Test Report **DOC. NO.:** GSA-FM-T09-F

NAME OF SAMPLE: Unrefined Shea Butter (Sheaman) **SAMPLE SIZE:** 2 x 500 g

DATE RECEIVED: 2026-01-21 **DATE(S) OF PERFORMANCE:** 2026-02-02 to 2026-03-02

SOURCE / PURPOSE: FOOD & DRINKS LABORATORY, GSA / PESTICIDE RESIDUES ANALYSIS

Specifications basis: EU MRLs for shea nut

Test Code	Test Conducted	Unit	Results	Test Methods	Specifications
ACP	Acephate	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/TS 17062:2019	0.02(Max)
ACT	Acetamiprid	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/TS 17062:2019	0.01(Max)
ACL	Aclonifen	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/TS 17062:2019	0.01(Max)
ALE	Allethrin	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/TS 17062:2019	0.01(Max) default
AME	Ametryn	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/TS 17062:2019	0.01(Max) default
AMI	Amicarbazone	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/TS 17062:2019	0.01(Max) default
ATR	Atrazine	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/TS 17062:2019	0.05(Max)
AZL	Azinphos-ethyl	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/TS 17062:2019	0.02(Max)
BES	Bensulfuron-methyl	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/TS 17062:2019	0.01(Max)

Test Code	Test Conducted	Unit	Results	Test Methods	Specifications
BOS	Boscalid	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
CBZ	Carbendazim	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.1(Max)
CHF	Chlorfenvinphos	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.02(Max)
CHL	Chlorpyrifos	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
CTD	Clothianidin	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
DIF	Difenoconazole	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.05(Max)
DIM	Dimethoate	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
DMT	Dimethomorph	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.02(Max)
FLZ	Fluazinam	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
FLP	Fluopyram	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
IMI	Imidacloprid	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)

Test Code	Test Conducted	Unit	Results	Test Methods	Specifications
IND	Indoxacarb	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
KRM	Kresoxim-methyl	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
MTL	Metalaxyl	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
MEH	Methamidophos	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.02(Max)
MTO	Methomyl	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
MEO	Metolachlor	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.05(Max)
MON	Monocrotophos	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.02(Max)
NSF	Nicosulfuron	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.02(Max)
PIM	Pirimiphos-methyl	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
PRC	Prochloraz	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.03(Max)
PMC	Promecarb	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max) default

Test Code	Test Conducted	Unit	Results	Test Methods	Specifications
PPQ	Propaquizafop	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
PMN	Pyrimethanil	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.02(Max)
PYR	Pyriproxyfen	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
SPI	Spiroxamine	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.05(Max)
SUL	Sulfoxaflor	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.02(Max)
TBC	Tebuconazole	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.02(Max)
TEB	Tebufenozide	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
TER	Terbutryn	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max) default
TMX	Thiamethoxam	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
TDF	Triadimefon	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)
TON	Triadimenol	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/ TS 17062:2019	0.01(Max)

Test Code	Test Conducted	Unit	Results	Test Methods	Specifications
TFX	Trifloxystrobin	mg/kg	<0.01	GSA-SM-T04* (2022-10): Multiresidue Method by LC-MS/MS based on CEN/TS 17062:2019	0.01(Max)

REMARKS: Acephate, Acetamiprid, Aclonifen, Allethrin, Ametryn, Amicarbazone, Atrazine, Azinphos-ethyl, Bensulfuron-methyl, Boscalid, Carbendazim, Chlorfenvinphos, Chlorpyrifos, Clothianidin, Difenoconazole, Dimethoate, Dimethomorph, Fluazinam, Fluopyram, Imidacloprid, Indoxacarb, Kresoxim-methyl, Metalaxyl, Methamidophos, Methomyl, Metolachlor, Monocrotophos, Nicosulfuron, Pirimiphos-methyl, Prochloraz, Promecarb, Propaquizafop, Pyrimethanil, Pyriproxyfen, Spiroxamine, Sulfoxaflor, Tebuconazole, Tebufenozide, Terbutryn, Thiamethoxam, Triadimefon, Triadimenol and Trifloxystrobin were below the limit of quantification (<0.01 mg/kg) in the Unrefined Shea Butter (Sheaman) sample (09/EA1/26) received from Food & Drinks Laboratory of Ghana Standards Authority and analysed.